STIC Search Report
EIC 3600

TO: Nga B Nguyen
Location: 5A89
Art Unit : 3692

Case Serial Number: 09/692455

From: Christian Miner
Location: EIC 3600
KNX-4B71
Phone: 571-272-3010

christian.miner@uspto.gov

Search Notes

Dear Examiner

Please review the following results.

If you have any questions or need a refocused please feel to contact me.

Christian Miner, MLIS
ASRC Management Services
US Patent & Trademark Office
Scientific & Technical Information Center
Electronic Information Center 3600

From: NGA NGUYEN [nga.nguyen@uspto.gov]
Sent: Wednesday, April 11, 2007 9:44 AM
To: STIC-EIC3600
Subject: Database Search Request, Serial Number: 09/692,455

Requester:
    NGA NGUYEN (P/3692)
Art Unit:
    GROUP ART UNIT 3692
Employee Number:
    76428
Office Location:
    KNX 05A89
Phone Number:
    (571)272-6796
Mailbox Number:

Case serial number:
    09/692,455
Class / Subclass(es):
    705/37
Earliest Priority Filing Date:
    10/20/1999
Format preferred for results:
    Paper
Search Topic Information:
        A method for determining whether or not to bid on a first bid item in a first
auction, the method implemented in a computer, the method comprising:
    determining whether or not a present price of the first bid item in the first auction
is less than a first preset value, the first preset value set to an estimated value of the
first bid item;
    determining to bid on the first bid item when it has been determined that the present
price of the first bid item in the first auction is less than the first preset value;
    determining, when it has been determined that the present price of the first bid item
in the first auction is not less than the first preset value, whether or not the present
price of the first bid item in the first auction is greater than a difference between a
combinatorial value and a second preset value, the second preset value set to an estimated
value of a second bid item that is able to be bid for in a second auction, the
combinatorial value set to an estimated value realizable when both the first bid item and
the second bid item are obtained;
    determining not to bid on the first bid item when it has been determined that the
present price of the first bid item in the first auction is greater than the difference
between the combinatorial value and the second preset value;
    determining, when it has been determined that the present price of the first bid item
in the first auction is not greater than the difference between the combinatorial value
and the second preset value, whether or not a sum of the present price of the first bid
item in the first auction and the present price of the second bid item in the second
auction is greater than the combinatorial value; and
    determining not to bid on the first bid item when it has been determined that the sum
of the present price of the first bid item in the first auction and the present price of
the second bid item in the second auction is greater than the combinatorial value.
Special Instructions and Other Comments:

1

```
; d s
Set       Items    Description
S1         9794    S AU=(FUJITA, S? OR FUJITA S? OR FUJITA(1N)(S OR SATORU))
S2        48234    S IC=G06F-019/00
S3           15    S S1 AND S2
S4           15    IDPAT (sorted in duplicate/non-duplicate order)
S5            9    IDPAT (primary/non-duplicate records only)
```

5/5/1 (Item 1 from file: 350) **Links**
Derwent WPIX

0013745061 *Drawing available*
WPI Acc no: 2003-843535/200378
XRPX Acc No: N2003-674096
Random number generating device for information communication networks, has pair of fine particles that mutually exchange charges and are located in vicinity of two current paths
Patent Assignee: TOSHIBA KK (TOKE)
Inventor: **FUJITA S; TANAMOTO T**

Patent Family (3 patents, 33 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030162587	A1	20030828	US 2003373874	A	20030227	200378	B
EP 1341079	A2	20030903	EP 2003251249	A	20030228	200378	E
JP 2003258240	A	20030912	JP 200254153	A	20020228	200378	E

Priority Applications (no., kind, date): JP 200254153 A 20020228

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20030162587	A1	EN	20	16	
EP 1341079	A2	EN			
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR				
JP 2003258240	A	JA	12		

Alerting Abstract US A1
NOVELTY - The device has a pair of current paths (1,2) arranged in parallel with each other. The current paths are formed on a surface area of a semiconductor substrate. A pair of fine particles (3,4) is located in the vicinity of the current paths and the particles mutually exchange charges. The current paths are electrically connected with any one of the fine particles.
USE - Used for generating random numbers in information communication networks e.g. Internet.
ADVANTAGE - The device has a smaller value of output bias, smaller circuit size and increases the speed at which random numbers are generated.
DESCRIPTION OF DRAWINGS - The drawing shows a conceptual diagram of a random number generating device.
1,2Current paths
3,4Fine particles
5,6,7Barriers
8Electron
23Quantum dots

Title Terms /Index Terms/Additional Words: RANDOM; NUMBER; GENERATE; DEVICE; INFORMATION; COMMUNICATE; NETWORK; PAIR; FINE; PARTICLE; MUTUAL; EXCHANGE; CHARGE; LOCATE; VICINITY; TWO; CURRENT; PATH

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/00; G06F-007/58; H01L-029/66			Main		"Version 7"
G06F-019/00; G09C-001/00; H01L-029/06; H03K-003/84			Secondary		"Version 7

US Classification, Issued: 463022000

File Segment: EPI;
DWPI Class: T01; U12
Manual Codes (EPI/S-X): T01-E04; T01-E05X; U12-E01B2

5/5/2 (Item 2 from file: 350) **Links**
Derwent WPIX
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0012619576 *Drawing available*
WPI Acc no: 2002-468080/200250
XRPX Acc No: N2002-369205
Sunshine display method for building design, by displaying sunshine condition in building automatically by calculating sunshine area for each time and season based on building data
Patent Assignee: SEKISUI HOUSE KK (SEKL)
Inventor: CHIKADA T; **FUJITA S**; GOTO K; IKEDA S; IWAMAE A; KIMURA F; UEDA K

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2002139576	A	20020517	JP 2000337786	A	20001106	200250	B
JP 3457940	B2	20031020	JP 2000337786	A	20001106	200369	E

Priority Applications (no., kind, date): JP 2000337786 A 20001106

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
JP 2002139576	A	JA	8	6		

JP 3457940	B2	JA	8		Previously issued patent	JP 2002139576

Alerting Abstract JP A

NOVELTY - Based on building data, the sunshine condition in a building is displayed automatically by calculating the sunshine area for each time and season.

DESCRIPTION - An INDEPENDENT CLAIM is also included for a sunshine display system.

USE - For displaying sunshine condition in building in case of building simulation in construction design stage.

ADVANTAGE - Effective information important in building design without performing complicated operation and without employing special research member.

DESCRIPTION OF DRAWINGS - The figure explains the searching of the coordinates of a shadow using a vector.

Title Terms /Index Terms/Additional Words: SUNSHINE; DISPLAY; METHOD; BUILD; DESIGN; CONDITION; AUTOMATIC; CALCULATE; AREA; TIME; SEASON; BASED; DATA

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G01W-001/12			Main		"Version 7"
G06F-017/60; **G06F-019/00**; G06T-015/60; G06T-017/50			Secondary		"Version 7

File Segment: EPI;
DWPI Class: S03; T01
Manual Codes (EPI/S-X): S03-D; T01-J; T01-J05A; T01-J10C4

5/5/3 (Item 3 from file: 350) **Links**
Derwent WPIX

0012502878 *Drawing available*
WPI Acc no: 2002-450750/200248
XRPX Acc No: N2002-355662
Optical environmental evaluation method for building, involves calculating illumination distribution in desired room based on shape data of room
Patent Assignee: SEKISUI HOUSE KK (SEKL)
Inventor: CHIKADA T; **FUJITA S**; GOTO K; IKEDA S; IWAMAE A; KIMURA F; UEDA K

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2002132853	A	20020510	JP 2000393505	A	20001225	200248	B

Priority Applications (no., kind, date): JP 2000247377 A 20000817

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2002132853	A	JA	11	9	

Alerting Abstract JP A
NOVELTY - The shape data of each room of a building for evaluation, is stored in a memory. The illumination distribution in the desired room is calculated, based on the stored shape data.
DESCRIPTION - An INDEPENDENT CLAIM is included for optical environmental evaluation device.
USE - For evaluating optical environment of building, for designing room arrangement, etc., using notebook type personal computer.
ADVANTAGE - Enables to evaluate the optical environment of each room.
DESCRIPTION OF DRAWINGS - The figure shows the internal structure of a personal computer. (Drawing includes non-English language text).

Title Terms /Index Terms/Additional Words: OPTICAL; ENVIRONMENT; EVALUATE; METHOD; BUILD; CALCULATE; ILLUMINATE; DISTRIBUTE; ROOM; BASED; SHAPE; DATA

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/50			Main		"Version 7"
G06F-019/00			Secondary		"Version 7

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J15

5/5/4 (Item 4 from file: 350) **Links**
Derwent WPIX
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0012302144 *Drawing available*
WPI Acc no: 2002-243393/200230
XRPX Acc No: N2002-188302
Maintenance support system for electronic apparatus, configures and reproduces apparatus in which trouble has occurred during execution of operation
Patent Assignee: FUJITA S (FUJI-I); ITO T (ITOT-I); NAKAMURA S (NAKA-I); OZAKI N (OZAK-I); SONY

CORP (SONY); UGAI T (UGAI-I)
Inventor: **FUJITA S**; ITO T; NAKAMURA S; OZAKI N; UGAI T; UKAI T

Patent Family (6 patents, 28 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 1150188	A2	20011031	EP 2001303496	A	20010417	200230	B
JP 2001309404	A	20011102	JP 2000115506	A	20000417	200230	E
US 20020007255	A1	20020117	US 2001835901	A	20010416	200230	E
US 6658374	B2	20031202	US 2001835901	A	20010416	200379	E
EP 1150188	B1	20060517	EP 2001303496	A	20010417	200637	E
DE 60119614	E	20060622	DE 60119614	A	20010417	200643	E
			EP 2001303496	A	20010417		

Priority Applications (no., kind, date): EP 2001303496 A 20010417; JP 2000115506 A 20000417

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
EP 1150188	A2	EN	34	17		
Regional Designated States,Original	AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR					
JP 2001309404	A	JA	21			
EP 1150188	B1	EN				
Regional Designated States,Original	DE FR GB					
DE 60119614	E	DE			Application	EP 2001303496
					Based on OPI patent	EP 1150188

Alerting Abstract EP A2
NOVELTY - A video processing system and a remote management center are connected through internet (9), and a trouble occurrence in the system is notified to the remote center. In response, the remote center configures a reproduction apparatus with same connection as that of the system and reproduces the apparatus in which the trouble has occurred during execution of an operation.
USE - For electronic apparatus such as video processing apparatus installed in broadcast station, office automation (OA) apparatus. Also for home electric/electronic appliances.
ADVANTAGE - Facilitates to identify the causes for the trouble quickly with simple components, and also provides suitable restorative measures that are to be taken at the time of occurrence of the trouble.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the maintenance support system.
9 Internet

Title Terms /Index Terms/Additional Words: MAINTAIN; SUPPORT; SYSTEM; ELECTRONIC; APPARATUS; CONFIGURATION; REPRODUCE; TROUBLE; OCCUR; EXECUTE; OPERATE

Class Codes

IPC	Class Level	Scope	Position	Status	Version Date
G06F-015/00; **G06F-019/00**; H04N-017/00			Main		"Version 7"
G06F-017/00; H04N-017/04; H04N-017/06			Secondary		"Version 7
G05B-0017/02	A	I	L	B	20060101
G05B-0019/042	A	I	F	B	20060101
G05B-0023/02	A	I	L	B	20060101
G05B-0017/02	A	I	L		20060101
G05B-0019/042	A	I		R	20060101
G05B-0019/042	A	I	F		20060101
G05B-0023/02	A	I	L		20060101
G05B-0017/00	C	I	L	B	20060101
G05B-0019/04	C	I	F	B	20060101
G05B-0017/00	C	I	L		20060101
G05B-0019/04	C	I		R	20060101
G05B-0019/04	C	I	F		20060101

US Classification, Issued: 702188000, 340870160, 702188000

File Segment: EPI;
DWPI Class: T01; T06
Manual Codes (EPI/S-X): T01-C03C1; T01-E03; T01-J10E; T06-A04B1; T06-A08; T06-A11

5/5/5 (Item 5 from file: 350) **Links**
Derwent WPIX

0010771461 *Drawing available*
WPI Acc no: 2001-385923/200141
XRPX Acc No: N2001-283506
Automatic bidding goods determining system for on-line auction, produces gain obtained and goods list for maximum gain based on table which stores goods price, relation and strategy information
Patent Assignee: NEC CORP (NIDE)
Inventor: **FUJITA S**

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2001118011	A	20010427	JP 1999298374	A	19991020	200141	B
JP 3419365	B2	20030623	JP 1999298374	A	19991020	200341	E

Priority Applications (no., kind, date): JP 1999298374 A 19991020

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
JP 2001118011	A	JA	24	25		
JP 3419365	B2	JA	24		Previously issued patent	JP 2001118011

Alerting Abstract JP A

NOVELTY - The system (12) stores input goods strategy information (1), goods relation (2), commercial value, purchase cost (4) and price, in memory (8). A gain calculator (6) computes gain (10) for purchase of desired goods from price, strategy and commercial value information. A strategy calculator (7) produces goods list (11) to attain optimum gain based on output of gain calculator for combination of goods.

DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

A. Automatic bidding goods determining method;
B. Automatic bid system;
C. Automatic bid procedure;
D. Bid support system;
E. Bid support procedure;
F. Recording medium storing bidding goods determining program

USE - For selecting goods for bidding for on-line auction in internet.

ADVANTAGE - Combination of goods that provide optimum gain to user is determined easily.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the automatic bidding goods determining system. (Drawing includes non-English language text).

1 goods strategy information
2 Goods relation
4 Purchase cost
6 Gain calculator
7 Strategy calculator
8 Memory
10 Gain
11 Goods list
12 Automatic bidding goods determining system

Title Terms /Index Terms/Additional Words: AUTOMATIC; BID; GOODS; DETERMINE; SYSTEM; LINE; AUCTION; PRODUCE; GAIN; OBTAIN; LIST; MAXIMUM; BASED; TABLE; STORAGE; PRICE; RELATED; STRATEGY; INFORMATION

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date

G06F-017/60; G06F-019/00			Main		"Version 7"

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05A1

5/5/6 (Item 6 from file: 350) **Links**
Derwent WPIX
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0010261690 *Drawing available*
WPI Acc no: 2000-574286/200054
XRPX Acc No: N2000-424943
Vote ticket reimbursement procedure involves reading fingerprint of voter on vote ticket
Patent Assignee: NEC CORP (NIDE)
Inventor: **FUJITA S**

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2000181971	A	20000630	JP 1998352824	A	19981211	200054	B

Priority Applications (no., kind, date): JP 1998352824 A 19981211

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2000181971	A	JA	4	2	

Alerting Abstract JP A
NOVELTY - The fingerprint of the voter on the vote ticket is read by an information reader during the vote ticket reimbursement operation.
DESCRIPTION - An INDEPENDENT CLAIM is also included for vote ticket reimbursement apparatus.
USE - For validity evaluation of vote tickets.
ADVANTAGE - The identity of a voter is determined easily. Forgery voting is identified if a mismatch between the fingerprint read and stored data occurs. Thereby preventing forgery in voting as persons can be easily identified.
DESCRIPTION OF DRAWINGS - The figure shows the surface diagram of the vote ticket reimbursement apparatus.

Title Terms /Index Terms/Additional Words: VOTE; TICKET; PROCEDURE; READ; FINGERPRINT

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-019/00			Main		"Version 7"
G07C-013/00			Secondary		"Version 7

File Segment: EPI;
DWPI Class: S05; T04; T05
Manual Codes (EPI/S-X): S05-D01C5A; T04-D02; T04-D04; T05-F

5/5/7 (Item 7 from file: 350) **Links**
Derwent WPIX

0010168273 *Drawing available*
WPI Acc no: 2000-477616/200042
XRPX Acc No: N2000-356021
Vote ticket processing method for processing tickets used in horse race, involves reading content of ticket based on which ticket are classified and amount to be paid is computed
Patent Assignee: NEC CORP (NIDE)
Inventor: **FUJITA S**

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2000148897	A	20000530	JP 1998335048	A	19981111	200042	B

Priority Applications (no., kind, date): JP 1998335048 A 19981111

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2000148897	A	JA	6	2	

Alerting Abstract JP A
NOVELTY - The content of the ticket (T) is sequentially read at the ticket insertion opening. Based on the content the tickets are classified and blank tickets are recovered. The amount to be reimbursed is calculated and paid to the ticket that is won. The card process unit (9) is then used to recover the won tickets.
USE - For processing vote tickets used in bicycle race, horse race, motor boat race, a car race and a treasure lot etc.
ADVANTAGE - Since the return and cancellation of the ticket is also done with classification and recovery of the ticket, the performance of the machine is increased.

DESCRIPTION OF DRAWINGS - The figure shows the schematic block diagram of vote ticket processing system.
9 Card process unit
T Ticket

Title Terms /Index Terms/Additional Words: VOTE; TICKET; PROCESS; METHOD; HORSE; RACE; READ; CONTENT; BASED; CLASSIFY; AMOUNT; PAY; COMPUTATION

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-019/00			Main		"Version 7"
G07C-013/00			Secondary		"Version 7

File Segment: EPI;
DWPI Class: T01; T04; T05
Manual Codes (EPI/S-X): T01-J05A1; T04-C02; T04-D04; T05-F

5/5/8 (Item 8 from file: 350) **Links**
Derwent WPIX
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0009202112 *Drawing available*
WPI Acc no: 1999-127097/199911
XRPX Acc No: N1999-093277
Telephone implemented banking system – has vocal transformation unit which converts contents pertaining to request of user to synthesised speech data, based on which suitability of transaction execution is judged
Patent Assignee: SANWA GINKO KK (SANW-N)
Inventor: **FUJITA S**; UEKI Y

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 11003382	A	19990106	JP 1997153748	A	19970611	199911	B

Priority Applications (no., kind, date): JP 1997153748 A 19970611

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 11003382	A	JA	11	7	

Alerting Abstract JP A

NOVELTY - A user is enabled to request required financial transactions through telephone (1) connected to public network (2). The contents of the request of the user is stored in a database (8). A vocal transformation unit (5) converts the stored contents to synthesised speech data. A detector judges the suitability to execute transaction, based on the synthesised speech data.

USE - None given.

ADVANTAGE - Trouble due to ambiguity of transaction intention is removed. DESCRIPTION OF DRAWING(S) - The figure shows the schematic diagram of the telephone banking system. (1) Telephone; (2) Public network; (5) Vocal transformation unit; (8) Database.

Title Terms /Index Terms/Additional Words: TELEPHONE; IMPLEMENT; BANK; SYSTEM; VOICE; TRANSFORM; UNIT; CONVERT; CONTENT; PERTAIN; REQUEST; USER; SYNTHESIS; SPEECH; DATA; BASED; SUIT; TRANSACTION; EXECUTE; JUDGEMENT

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-019/00			Main		"Version 7"
G06F-003/16			Secondary		"Version 7

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-C08; T01-J

5/5/9 (Item 9 from file: 350) **Links**
Derwent WPIX

0006212052 *Drawing available*
WPI Acc no: 1993-000947/199301
XRPX Acc No: N1993-000563
Control data generating system for automatic prodn. line - uses process and prodn.-planning systems to provide programs for NC machines after conversion of configuration data and prodn. features
Patent Assignee: MITSUBISHI DENKI KK (MITQ)
Inventor: **FUJITA S**; OHNAMI M; OONAMI M; OOUCHI S; OUCHI S

Patent Family (3 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
DE 4219902	A1	19921224	DE 4219902	A	19920617	199301	B
US 5402349	A	19950328	US 1992897942	A	19920615	199518	E
DE 4219902	C2	19960418	DE 4219902	A	19920617	199620	E

Priority Applications (no., kind, date): JP 1991176043 A 19910620

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
DE 4219902	A1	DE	13	6		
US 5402349	A	EN	13	6		
DE 4219902	C2	DE	12	6		

Alerting Abstract DE A1
The system includes a process planning system for the input of e.g. configuration and tolerance data from drawings. Process planning is carried out w.r.t. machine data. A production planning system provides schedule plans and an automatic programming system provides programs to control machines such as NC machine tools and robots. A device performs the formal conversion of configuration data and production features of parts which were produced a process planning stage. The converted data and features are transferred to the automatic programming system to generate NC programs.
ADVANTAGE - Simple conversion of data, increased effectiveness of prodn. line.

Title Terms /Index Terms/Additional Words: CONTROL; DATA; GENERATE; SYSTEM; AUTOMATIC; PRODUCE; LINE; PROCESS; PLAN; PROGRAM; NC; MACHINE; AFTER; CONVERT; CONFIGURATION; FEATURE

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-015/46; G06F-019/00			Main		"Version 7"

US Classification, Issued: 364468000, 364191000, 395904000

File Segment: EPI;
DWPI Class: T01; X25
Manual Codes (EPI/S-X): T01-J07B; X25-A03; X25-A03E

File 348: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.

File 349: For important information about IPCR/8 and forthcoming changes to the IC= index, see HELP NEWSIPCR.


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Set       Items    Description
S1          474    S AU=(FUJITA, S? OR FUJITA S? OR FUJITA(1N)(S OR SATORU))
S2       196679    S BID OR BIDS OR BIDDING OR OFFER OR OFFERS OR (COMPETITIVE OR
COUNTER)()(OFFER? OR BID???) OR COUNTEROFFER?
S3         7559    S IC=(G06F-019/00 OR G06F-015/02)
S4           13    S S1 AND S2
S5           13    IDPAT (sorted in duplicate/non-duplicate order)
S6           13    IDPAT (primary/non-duplicate records only)
S7            1    S S1 AND S3
```

EUROPEAN PATENTS
01105842
Distributed agent software system and method having enhanced process mobility and communication in a computer network
Verteiltes Agentsoftwaresystem und Verfahren mit verbesserter Prozessmobilitat und Kommunikation in einem Rechnernetzwerk
Systeme logiciel d'agent distribue et methode avec mobilite et communication ameliorees dans un reseau d'ordinateurs

Patent Assignee:

• **NEC CORPORATION**; (236690)
  7-1, Shiba 5-chome, Minato-ku; Tokyo; (JP)
  (Applicant designated States: all)

Inventor:

• **Jagannathan, Suresh**
  c/o NEC Research Inst.,Inc., 4 Independence Way; Princeton, New Jersey 08540; (US)

• **Kelsey, Richard a.**
  c/o NEC Research Inst.,Inc., 4 Independence Way; Princeton, New Jersey 08540; (US)

• **Philbin, James F.**
  c/o NEC Research Inst.,Inc., 4 Independence Way; Princeton, New Jersey 08540; (US)

• **Fujita, Satoru**
  NEC Corporation, 7-1, Shiba 5-chome, Minato-ku; Tokyo; (JP)

• **Koyama, Kazuya**
  NEC Corporation, 7-1, Shiba 5-chome, Minato-ku; Tokyo; (JP)

• **Yamanouchi, Toru**
  NEC Corporation, 7-1, Shiba 5-chome, Minato-ku; Tokyo; (JP)

• **...US)**
  ; ;

• **Fujita, Satoru**
  ; ;

Legal Representative:

• **Betten & Resch (101031)**
  Postfach 10 02 51; 80076 Munchen; (DE)

	Country	Number	Kind	Date	
Patent	EP	969364	A2	20000105	(Basic)
	EP	969364	A3	20051228	
Application	EP	99111370		19990610	

Priorities	US	109412		19980630	

Designated States:
AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LI; LU; MC; NL; PT; SE;

Extended Designated States:
AL; LT; LV; MK; RO; SI;

International Patent Class (V7): G06F-009/46 Abstract EP 969364 A2

A distributed software system and method are provided for use with a plurality of potentially heterogeneous computer machines connected as a network. The system may comprise at least one agent comprising a protection domain, wherein the protection domain of the at least one agent resides on at least two of the plurality of computer machines. A plurality of objects is contained within the protection domain of the at least one agent, a first object residing on a first of the at least two computer machines and a second object residing on a second of the at least two computer machines. The objects are selectively movable among the at least two computer machines by a programmer of the system. The first object on the first computer machine may access the second object on the second computer machine in a location-transparent or network-transparent manner; that is, without knowledge of the physical address of the second object on the second computer machine and regardless of the selective movement of either the first object or the second object among the first and second computer machines. The agent is mobile and may migrate, in whole or in part, to any other machine or machines in the network. Each distributed agent may be distributed among one, several or many of the machines of the network. Migration of agents, even during process execution, is straightforward and maintains consistency across the network. Specifically, other agents may continue to access a particular agent after it has migrated without any prior notification to the agents themselves.

Abstract Word Count: 257
NOTE: 3
NOTE: Figure number on first page: 3

Type	Pub. Date	Kind	Text
Search Report:	20051228	A3	Separate publication of the search report
Application:	20000105	A2	Published application without search report
Change:	20060906	A2	Title of invention (French) changed: 20060906
Change:	20060906	A2	Title of invention (English) changed: 20060906
Change:	20060906	A2	Title of invention (German) changed: 20060906
Change:	20060524	A2	Title of invention (German) changed: 20060524
Change:	20060524	A2	Title of invention (English) changed: 20060524
Change:	20060524	A2	Title of invention (French) changed: 20060524

Publication: English
Procedural: English
Application: English

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200001	4386
SPEC A	(English)	200001	12519
Total Word Count (Document A) 16905			

| Total Word Count (Document B) 0 |
| Total Word Count (All Documents) 16905 |

Specification: ...memory" abstraction in a distributed network environment. Moreover, the agents of the present invention also **offer** enhanced modularity and protection facilities by providing encapsulation of tasks and data which preferably prohibits...in clusters of high performance computers. As particular examples of such utility, the present invention **offers** effective support for network-centric application in which mobility is important. Such applications may include...

7/5K/1 (Item 1 from file: 348) **Links**
EUROPEAN PATENTS

00738621
Portable terminal apparatus and an information processing method therefor
Tragbares Terminalgerat und Informationsverarbeitungsverfahren dafur
Dispositif de terminal portable et methode de traitement d'information correspondante

Patent Assignee:

- **FUJITSU LIMITED**; (211460)
    1015, Kamikodanaka, Nakahara-ku; Kawasaki-shi, Kanagawa 211; (JP)
    (applicant designated states: DE;FR;GB)

Inventor:

- **Fujita, Shigeru, c/o Fujitsu Limited**
    1015, Kamikodanaka, Nakahara-ku; Kawasaki-shi, Kanagawa, 211; (JP)

- **Mukai, Norimitsu, c/o Fujitsu Limited**
    1015, Kamikodanaka, Nakahara-ku; Kawasaki-shi, Kanagawa, 211; (JP)

- **Yamato, Miho, c/o Fujitsu Limited**
    1015, Kamikodanaka, Nakahara-ku; Kawasaki-shi, Kanagawa, 211; (JP)

- **Sadai, Keiji, c/o Fujitsu Limited**
    1015, Kamikodanaka, Nakahara-ku; Kawasaki-shi, Kanagawa, 211; (JP)

- **Fujita, Shigeru, c/o Fujitsu Limited...**
    ; ;

Legal Representative:

- **Seeger, Wolfgang, Dipl.-Phys. (11006)**
    Georg-Hager-Strasse 40; D-81369 Munchen; (DE)

	Country	Number	Kind	Date	
Patent	EP	696774	A2	19960214	(Basic)
	EP	696774	A3	19960828	
Application	EP	95108991		19950611	
Priorities	JP	94169809		19940721	

Designated States:
DE; FR; GB;

International Patent Class (V7): G06F-015/02; ; ; G06F-015/02Abstract EP 696774 A3

In a portable terminal apparatus, character information corresponding to map information of destination is displayed or updated. The information such as the map information of destination is entered from an information input unit employed in the portable terminal apparatus, and a display sequence is determined by a display sequence determining unit. A position of destination is set by using a pen and the like by the portable terminal apparatus. The set position data is transferred to a host computer so as to update map data stored in the host computer. With the execution of the above-described operations, operability of the portable terminal apparatus can be improved, and the customer can be quickly and surely managed. (see image in original document)

Abstract Word Count: 141

Type	Pub. Date	Kind	Text
Withdrawal:	20000726	A2	Date application deemed withdrawn: 20000331
Application:	19960214	A2	Published application (A1with;A2without)
Search Report:	19960828	A3	Separate publication of the European or International search report
Examination:	19970416	A2	Date of filing of request for examination: 970218
Examination:	19991103	A2	Date of dispatch of the first examination report: 19990920

Publication: English
Procedural: English
Application: English

Available Text	Language	Update	Word Count
CLAIMS A	(English)	EPAB96	959
SPEC A	(English)	EPAB96	11030
Total Word Count (Document A) 11989			
Total Word Count (Document B) 0			
Total Word Count (All Documents) 11989			

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Set      Items     Description
S1          0     S AU=(FUJITA, S? OR FUJITA S? OR FUJITA(1N)(S OR SATORU))
S2        268     S BID OR BIDS OR BIDDING OR(COMPETITIVE OR COUNTER)()(OFFER? OR BID???) OR
COUNTEROFFER?
S3          0     S S1 AND S2
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; d s
Set    Items      Description
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S2    132761      S BID OR BIDS OR BIDDING OR(COMPETITIVE OR COUNTER)()(OFFER? OR BID???) OR
COUNTEROFFER?
S3         6      S S1 AND S2
S4         3      RD (unique items)
```

4/5/1 (Item 1 from file: 2) **Links**
  Fulltext available through: <u>John Wiley and Sons</u>   <u>USPTO Full Text Retrieval Options</u>
INSPEC
09536562 **INSPEC Abstract Number:** C2005-09-7180-046
Title: An auction agent for bidding on combinatorial items
Author Matsumoto, Y.; **Fujita, S.**
Author Affiliation: Dept. of Comput. Intelligence & Syst. Sci., Tokyo Inst. of Technol., Japan

Language: English   **Document Type:** Journal Paper (JP)
Treatment: Practical (P); Theoretical (T)
Abstract: In this paper, the authors describe and analyze the performance of a technique for maximizing the profit when **bidding** for a combination of goods from multiple auctions that are being conducted independently. First, they classified the methods of combining the goods when the goods are complementary goods, independent goods, or substitutive goods, and for each method, they derived the region in which a positive profit was obtained when the final winning price was known. Next, they proposed a **bidding** strategy for sequential auctions when the winning price was represented by a probability distribution, and performed a numerical analysis, in particular, when the probability distribution was assumed to be a uniform distribution. They performed two simulation experiments for the proposed strategy to evaluate its performance. These simulation experiments verified that the proposed technique was superior in situations where no other bidder was **bidding** on the combination of goods, that is, other bidders **bid** independently for each individual good, as well as situations where another bidder did **bid** on the combination of goods. (9 Refs)
 Subfile: C
Descriptors: electronic commerce; goods distribution; probability
Identifiers: auction agent; combinatorial item; complementary good; independent good; substitutive good; **bidding** strategy; probability distribution; autonomous **bidding** agent; combinatorial problem
Class Codes: C7180 (Retailing and distribution computing); C1140Z (Other topics in statistics)

4/5/2 (Item 2 from file: 2) **Links**
   Fulltext available through: <u>USPTO Full Text Retrieval Options</u>
INSPEC
09415976 **INSPEC Abstract Number:** C2005-07-1290D-018
Title: On heuristics for solving winner determination problem in combinatorial auctions
Author Mito, M.; **Fujita, S.**
Author Affiliation: Dept. of Inf. Eng., Hiroshima Univ., Japan

Language: English   Document Type: Journal Paper (JP)
Treatment: Applications (A); Theoretical (T)
Abstract: The winner determination problem (WDP) in combinatorial auctions is the problem of - given a finite set of combinatorial bids B - finding a feasible subset B' of B with a maximum revenue. WDP is known to be equivalent to the maximum weight set packing problem, and hard to approximate by polynomial time algorithms. This paper proposes three heuristic bid ordering schemes for solving WDP; the first two schemes take into account the number of goods shared by conflicting bids, and the third one is based on a recursive application of such local heuristic functions. We conducted several experiments to evaluate the goodness of the proposed schemes. The result of experiments implies that the first two schemes are particularly effective to improve the performance of the resulting heuristic search procedures. More concretely, they are scalable compared with the conventional linear programming (LP) relaxation based schemes, and could quickly provide an optimum solution under optimization schemes such as the branch-and-bound method. In addition, they exhibit a good anytime performance competitive to the LP-based schemes, although it is sensitive to configurable parameters controlling the strength of contributions of bid conflicts to the resultant bid ordering schemes. (14 Refs)
 Subfile: C
Descriptors: bin packing; combinatorial mathematics; electronic commerce; heuristic programming; linear programming
Identifiers: winner determination problem; combinatorial auctions; maximum weight set packing problem; heuristic bid ordering; linear programming relaxation; optimization; e-commerce
Class Codes: C1290D (Systems theory applications in economics and business); C1160 (Combinatorial mathematics); C1180 (Optimisation techniques)

4/5/3 (Item 3 from file: 2) **Links**
INSPEC
08535382   INSPEC Abstract Number: C2003-03-7120-066
Title: An auction agent for bidding on combinations of items
Author Matsumoto, Y.; **Fujita, S.**
Author Affiliation: Computational Intelligence & Syst. Sci., Tokyo Inst. of Technol., Yokohama, Japan
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents   p. 552-9
Editor(s): Muller, J.P.; Andre, E.; Sen, S,; Frasson, C.
Publisher: ACM , New York, NY, USA
Publication Date: 2001 Country of Publication: USA xiii+666 pp.
ISBN: 1 58113 326 X   Material Identity Number: XX-2002-03003
U.S. Copyright Clearance Center Code: 1-58113-326-X/01/0005...$5.00
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents
Conference Sponsor: ACM
Conference Date: 28 May-1 June 2001   Conference Location: Montreal, Que., Canada

Language: English   Document Type: Conference Paper (PA)

Treatment: Theoretical (T); Experimental (X)

Abstract: This paper describes a way to obtain sub-optimal profits in **bidding** for combinations of goods that are on auction at different sites, and results for an autonomous agent that **bids** for goods according to the proposed strategy. The types of requirements for combinations are classified as complementary, substitutive and independent. For each type, this paper specifies the region in which **bidding** on goods will make a positive profit. A **bidding** strategy is then proposed for sequential auctions under the condition that the **bids** by the other participants in the auction can be represented by a probabilistic function. Two simulations were constructed to evaluate the proposed strategy. They indicated that the agent that applies the proposed strategy was superior to others that **bid** for combinations of goods according to simple and intuitive strategies. The simulations also indicated that the proposed strategy was the equilibrium strategy of those we tested, when two agents were simultaneously **bidding** for the same combination of goods. (9 Refs)

Subfile: C

Descriptors: electronic commerce; Internet; probability; software agents

Identifiers: auction agent; **bidding**; item combinations; sub-optimal profits; autonomous agent; sequential auctions; probabilistic function; simulations; equilibrium strategy; electronic commerce; Internet

Class Codes: C7120 (Financial computing); C7180 (Retailing and distribution computing) ; C6170 (Expert systems and other AI software and techniques); C7210N (Information networks); C6150N (Distributed systems software)

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; d s
Set      Items     Description
S1          58     S AU=(FUJITA, S? OR FUJITA S? OR FUJITA(1N)(S OR SATORU))
S2      957374     S BID OR BIDS OR BIDDING OR(COMPETITIVE OR COUNTER)()(OFFER? OR BID???) OR
COUNTEROFFER?
S3    18777948     S AUCTION? OR MULTIAUCTION OR MULTI()AUCTION OR EXCHANGE OR INTERCHANGE OR
MARKET OR NETWORK OR SYSTEM OR TRADING OR MATCHING OR BIDDING
S4          11     S S1 AND S3
S5          11     RD   (unique items)
```

5/3,K/1 (Item 1 from file: 15) <u>Links</u>
01697091   03-48081
A quorum based k-mutual exclusion by weighted k-quorum systems

Fujita, Satoshi
Fujita, Satoshi

Abstract:

A scheme is proposed for solving the k-mutual exclusion problem in a
distributed **system**, which is a generalization of the quorum-based
scheme for solving the distributed mutual exclusion...

...set of weighted quorums as the underlying structure, which can be
constructed from any quorum **system** by applying the technique of
k-decomposition. The notion of balanced k-decomposition and a...

5/3,K/2 (Item 2 from file: 15) <u>Links</u>
01433593   00-84580
The concept and practice of the production seat system

Tamura, Takayoshi; **Fujita, Seiichi**; Kuga, Takeo
The concept and practice of the production seat system
...Fujita, Seiichi

Abstract:

Features of the production seat **system** and its industrial
applications in Japan are presented. Like an airline reservation
system, customers' orders are booked on the production seat table in
the production seat **system**. Then orders are released from the
production table to work processes at every production order cycle. To
show the effectiveness of the production seat **system**, a simple
simulation was conducted. It was observed that the production seat
system would achieve better observance of customer delivery dates
and would reduce the average population lead time when compared with the
traditional production planning and scheduling **system**.

5/3,K/3 (Item 3 from file: 15) <u>Links</u>

01193899   98-43294
Designing customer oriented production planning system (COPPS)

Tamura, Takayoshi; **Fujita, Seiichi**
International Journal of Production Economics   v41n1-3 pp: 377-385
Oct 1995
ISSN: 0925-5273 **Journal Code:** EPE
Designing customer oriented production planning system (COPPS)
...Fujita, Seiichi

Abstract:

A new production planning and scheduling **system** in which production
seats are first created based on forecasted demand, and then orders
received are assigned to the seats, is described.. This **system** is
named the customer oriented production planning **system** (COPPS). The
scheduling procedure and advantages of COPPS are discussed. The
system performance of COPPS is compared with the traditional MRP
through a simulation experiment. Although COPPS...

...be solved, some Japanese manufacturing firms already established
COPPS-like systems by constructing the information **system** which
integrates both sales and production activities.

5/3,K/4 (Item 4 from file: 15) <u>Links</u>

01041403   96-90796
A note on the size of a multicast tree in hypercubes

Fujita, Satoshi
Information Processing Letters   v54n4 pp: 223-227
May 26, 1995
ISSN: 0020-0190 **Journal Code:** IPL
Fujita, Satoshi

Abstract:

...disseminating information from a source node to the set of destination
nodes through a given **network**. The problem is efficiently solved by
flowing packets carrying the information along a tree, in...

...source node is connected with each destination node by a shortest path
in a given **network**.   Such a tree is generally called a multicast
tree.   Lan et al (1990) proposed a...

5/3,K/5 (Item 1 from file: 148) <u>**Links**</u>
Gale Group Trade & Industry DB
(c)2007 The Gale Group. All rights reserved.
10171152   **Supplier Number:** 20376577 (USE FORMAT 7 OR 9 FOR FULL TEXT)
**Computer analysis in the automotive industry. (computational fluid dynamics, finite element analysis, and
dynamic simulation are essential tools for automotive engineers)**

Howe, J. Gavin; Salaani, Mohamed Kamel; Rupp, Matthew Y.; Jang, Bong-Choo; Woodburn, Charles M.;
Guenther, Dennis A.; Heydinger, Gary J.; Her, Jen Y.; Wallis, Stan; Kulkarni, Kumar B.; Kuschinsky, Scott D.;
Thyagarajan, Ravi S.; Chen, Richard H.; Lee, Wen Tzong; Yamane, Kiyoshi; Hase, Nobutoshi; **Fujita, Sadao**;
Isomura, Ryouji; Takeda, Ikuya; Sumitani, Keiji; Murayama, Toshiyuki; Bergamini, P.; Casella, M.; Vitali, D.F.;
Ukita, Tetsuji; China, Hiroshi; Kanie, Keisuke; Bouzida, S.; Mignot, C.; Blarasin, Adriano; Giunti, Tommaso
Automotive Engineering , v105 , n11 , p49(7)
Nov , 1997
ISSN: 0098-2571
Language: English
Record Type: Fulltext; Abstract
Word Count: 5694   **Line Count:** 00481
...Fujita, Sadao

As the automotive industry demands products of increasing quality in a
shorter time to **market**, engineers turn to computer-aided engineering
(CAE) tools for help. One of these tools, computational...conditions
provided the same results.
      In the context of concurrent engineering, the engineers created a
system linked to CAD with which an FEA model can be created easily.
In this manner...

...number. Although the numerical predictions overestimated the friction
coefficient but underestimated the gain in heat **exchange**, the
results did proceed in the correct direction. Visualization of the flow
field also helped the automotive industry continues to reduce time-to-
market of its new products, evaluation of component durability at
the design stage becomes an effective...

...inside the head form are gathered using a computer equipped with a
highspeed data acquisition **system**. Appropriately located highspeed
cameras are also used to record the entire event (typical duration of using
a local coordinate **system**.
      Deceleration of the head form was monitored and compared with the
results from previous tests...formulations to solve the dynamics of rigid
bodies. Subsystem models for the tires, aerodynamics, steering
system, braking systems, and powertrain are coupled with the
recursive dynamics core of NADSdyna. Four tire...

...Taurus. This evaluation effort is being extended to include acceleration
maneuvers, a complete dynamic steering system, and other vehicles
including a tractor semi-trailer.
       After the off-line evaluation of the...

5/3,K/6 (Item 2 from file: 148) **Links**
Gale Group Trade & Industry DB
08631164   Supplier Number: 18243768
**Designing customer oriented production planning system (COPPS).(Special Issue: Proceedings of the 12th
International Conference on Production Research)**

Tamura, Takayoshi; **Fujita, Seiichi**
International Journal of Production Economics , v41 , n1-3 , p377(9)
Oct , 1995
ISSN: 0925-5273
Language: English
Record Type: Abstract
**Designing customer oriented production planning system (COPPS).(Special Issue: Proceedings of the 12th
International Conference on Production Research)**
...Fujita, Seiichi

**Abstract: A new production planning and scheduling system called COPPS (customer oriented production
planning system) is presented. The model describes an initial production schedule which features forecasted
demand and related variables in production capacity. The system can easily respond to customer inquiries
due to an on-line production schedule that is...**

5/3,K/7 (Item 3 from file: 148) **Links**
Gale Group Trade & Industry DB
03592861   Supplier Number: 06859244
DAT hardware failing to catch on: new market review blames dearth of software.

Hennessey, Mike; **Fujita, Shig**; Spahr, Wolfgang
Billboard , v100 , n48 , p1(2)
Nov 26 , 1988
ISSN: 0006-2510
Language: ENGLISH
Record Type: CITATION
DAT hardware failing to catch on: new market review blames dearth of software.
...Fujita, Shig

5/3,K/8 (Item 4 from file: 148) **Links**
Gale Group Trade & Industry DB

01980218   Supplier Number: 03103691
International repertoire explosion keys upturn in Japanese market. (music trade)

Fujita, Shig
Billboard , v96 , p9(1)
Jan 21 , 1984
ISSN: 0006-2510
Language: ENGLISH
Record Type: CITATION
International repertoire explosion keys upturn in Japanese market. (music trade)
Fujita, Shig

5/3,K/9 (Item 5 from file: 148) **Links**
Gale Group Trade & Industry DB
01706496   Supplier Number: 02769564
Japan: where technology greets tradition. (Billboard International Market Profile)

Fujita, Shig
Billboard , v95 , pJ1(13)
May 21 , 1983
ISSN: 0006-2510
Language: ENGLISH
Record Type: ABSTRACT
Japan: where technology greets tradition. (Billboard International Market Profile)
Fujita, Shig

5/3,K/10 (Item 1 from file: 275) **Links**
Gale Group Computer DB(TM)
01569357   Supplier Number: 14374826
Availability of k-coterie. (Technical)

Ae, Tadashi; Kakugawa, Hirotsugu; **Fujita, Satoshi**; Yamashita, Masafumi
IEEE Transactions on Computers , v42 , n5 , p553(6)
May , 1993
Document Type: Technical
ISSN: 0018-9340
Language: ENGLISH   **Record Type:** ABSTRACT
...Fujita, Satoshi

Abstract: ...guaranteeing that a maximum of k processes can enter a critical section of a distributed **system** simultaneously is known as the distributed k-mutual exclusion problem or the 1-mutex problem...

5/3,K/11 (Item 2 from file: 275) **Links**
Gale Group Computer DB(TM)
01227239   **Supplier Number:** 07156531
Relationship between P-valued majority functions and P-valued threshold functions. (technical)

Yamamoto, Yoshinori; **Fujita, Shiro**
IEEE Transactions on Computers , v37 , n11 , p1442(4)
Nov , 1988
Document Type: technical
ISSN: 0018-9340
Language: ENGLISH   **Record Type:** ABSTRACT
...**Fujita, Shiro**
Descriptors: ...**System** Design

[File 9] **Business & Industry(R)** Jul/1994-2007/May 08

[File 20] **Dialog Global Reporter** 1997-2007/May 09

[File 476] **Financial Times Fulltext** 1982-2007/May 09

[File 610] **Business Wire** 1999-2007/May 09
File 610: File 610 now contains data from 3/99 forward. Archive data (1986-2/99) is available in File 810.

[File 613] **PR Newswire** 1999-2007/May 09
File 613: File 613 now contains data from 5/99 forward. Archive data (1987-4/99) is available in File 813.

[File 624] **McGraw-Hill Publications** 1985-2007/May 09
File 624: Homeland Security & Defense and 9 Platt energy journals added Please see HELP NEWS624 for more

[File 636] **Gale Group Newsletter DB(TM)** 1987-2007/May 08

[File 634] **San Jose Mercury** Jun 1985-2007/May 08

[File 810] **Business Wire** 1986-1999/Feb 28

[File 813] **PR Newswire** 1987-1999/Apr 30

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S2    29619066    S AUCTION? OR MULTIAUCTION OR MULTI()AUCTION OR EXCHANGE OR INTERCHANGE OR
MARKET OR NETWORK OR SYSTEM OR TRADING OR MATCHING OR BID OR BIDS OR BIDDING OR OFFER OR
OFFERS OR (COMPETITIVE OR COUNTER)()(OFFER? OR BID???) OR COUNTEROFFER?.
S3           0    S S1 AND S2
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File 350: DWPI has been enhanced to extend content and functionality of the database. For more info, visit http://www.dialog.com/dwpi/.

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; d s
Set      Items   Description
S1     4218040    S AUTOMATIC???? OR SELECTIVELY OR DYNAMIC??? OR REAL()TIME OR REALTIME OR
ADAPTABL? OR ALTERABL? OR ALTERNAT? OR CHANGEABL? OR CONVERTIBL? OR ADJUSTABL? OR FLEXIB?
OR IMMEDIATE? OR INSTANT? OR INTERACTIV? OR ITERAT? OR MODIFIABL? OR ON(1W)FLY OR
SIMULTANEOUS? OR SYNCHRONOUS? OR UP(1W)DATE OR UP(2W)MINUTE OR UPDATE?
S2     1448817    S AUCTION? ? OR MULTIAUCTION OR MULTI()AUCTION OR EXCHANGE OR INTERCHANGE
OR MARKET OR NETWORK OR SITE OR TRADING OR MATCHING OR BID OR BIDS OR BIDDING OR OFFER OR
OFFERS OR EQUILIBRIUM OR CALCULATOR OR (COMPETITIVE OR COUNTER)()(OFFER? OR BID???) OR
COUNTEROFFER?
S3     10031076   S PLAN? ? OR MODEL? ? OR STRATEG??? OR DESIGN? ? OR METHOD? ? OR
BLUEPRINT? ? OR LAYOUT? ? OR SYSTEM? ? OR SCHEME? ? OR PROCEDURE? ?
S4      121034    S OPTIMI?ATION OR COMBINED()VALUE OR (OPTIM??? OR OPTIMI?ATION OR
SUB()OBTIM BEST OR GREATEST OR BIGGEST OR MOST OR LARGEST OR MAXIM??? OR TOP OR FAVORABLE
OR FAVOURABLE OR HIGHEST OR POSITIVE)(3N)(RETURN? ? OR WORTH OR VALUE? ? OR GAIN? ? OR
EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR MARGIN? ?)
S5       20969    S S1 (2W) S2
S6        4450    S S5 (3N) S3
S7          32    S S6 (S) S4
S8          32    S IC=(G06F-019/00 OR G06F-015/02 OR G06F-017/60)
S9          32    S S7 AND S8
S10       6716    S (COMBINATION? ? OR COMBINATORIAL OR COMBINATIONAL) (3N) (RETURN? ? OR
WORTH OR VALUE? ? OR GAIN? ? OR EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR
PROCEEDS OR MARGIN? ? OR GOOD? ?)
S11        418    S S10 (S) S4
S12        221    S S11 (S) S3
S13         51    S S12 AND S2
S14         22    S S13 AND IC=(G06F)
S15         22    IDPAT (sorted in duplicate/non-duplicate order)
S16         12    IDPAT (primary/non-duplicate records only)
S17         12    S S16 NOT S9
```

0016496214 *Drawing available*
WPI Acc no: 2007-212440/200722
XRPX Acc No: N2007-157493
Alternate hedge trading optimization system for computer application, performs optimization portfolio calculation and ratio of goods which are determined by group are combined based on calculated coefficient and profit-and-loss
Patent Assignee: HITACHI LTD (HITA)
Inventor: MATSUSHITA T; NIKI S; TAKAHASHI S

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2007004570	A	20070111	JP 2005185051	A	20050624	200722	B

Priority Applications (no., kind, date): JP 2005185051 A 20050624

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2007004570	A	JA	12	7	

Alerting Abstract JP A
NOVELTY - A calculator (507) calculates the price fluctuation rate data of the hedge target product (503) and alternative candidate goods group are calculated based on the price time series data of the group. The profit and loss in the date of delivery of the hedge target product is calculated. An optimization portfolio calculation (511) is performed and the ratio of the substitutive goods determined out of the group are combined based on the calculated correlation coefficient of price change rate (509) and the profit-and-loss value.
USE - For computer applications.
ADVANTAGE - The system elects substitutive goods by narrowing down of the appropriateness of a fluid high substitutive-goods candidate group to the low hedge target product of a commodity market liquidity. The system enables the optimization of the portfolio.
DESCRIPTION OF DRAWINGS - The figure shows a structure of the whole hedge trading optimization system. (Drawing includes non-English language text).
501 Data vendor
503 Network
503 Hedge target product
507 Calculator
509 Price change rate
511 Optimization portfolio calculation

Title Terms /Index Terms/Additional Words: ALTERNATE; HEDGE; TRADE; OPTIMUM; SYSTEM; COMPUTER; APPLY; PERFORMANCE; PORTFOLIO; CALCULATE; RATIO; GOODS; DETERMINE ; GROUP; COMBINATION; BASED; COEFFICIENT; PROFIT; LOSS

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06Q-0040/00	A	I	F	B	20060101
G06Q-0040/00	C	I .		B	20060101

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-N01A2E

7/5/7 (Item 7 from file: 350) **Links**
Derwent WPIX
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0014773154 *Drawing available*
WPI Acc no: 2005-120819/200513
XRPX Acc No: N2005-104241
Machine learning trading system for buying/selling trading order, has module taking optimized buy/sell signals and trading results to build new signals, and execution platform transferring self-optimized orders to exchanges
Patent Assignee: MAKOR ISSUES & RIGHTS LTD (MAKO-N); MYR D (MYRD-I)
Inventor: MYR D

Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050015323	A1	20050120	US 2003613467	A	20030703	200513	B
GB 2417796	A	20060308	GB 200418523	A	20040819	200619	NCE

Priority Applications (no., kind, date): GB 200418523 A 20040819; US 2003613467 A 20030703

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20050015323	A1	EN	15	6	

Alerting Abstract US A1

NOVELTY - The system has a software module building trading strategy to generate self-optimized buy/sell trading signals based on trading parameters. A machine learning mechanism module takes the signals and the trading results as input to build new signals based on new and updated trading results, and parameters. An automatic execution platform transfers self-optimized buy/sell orders from trader's computer to computerized exchanges.

USE - Used for buying/selling trading order for a security.

ADVANTAGE - The automatic execution platform transfers the self-optimized orders to the exchanges, thus automatically sending buy or bell trading orders for selected security. The system thus allows active market participation.

DESCRIPTION OF DRAWINGS - The drawing shows a graphical overview of a machine learning mechanism.

Title Terms /Index Terms/Additional Words: MACHINE; LEARNING; TRADE; SYSTEM; BUY; SELL; ORDER; MODULE; OPTIMUM; SIGNAL; RESULT; BUILD; NEW; EXECUTE; PLATFORM; TRANSFER; SELF; EXCHANGE

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60			Main		"Version 7"
G06Q-0040/00	A	I	F	B	20060101
G06Q-0050/00	A	I	L	B	20060101

US Classification, Issued: 705037000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05B4; T01-J16C2; T01-N01A2F

7/5/8 (Item 8 from file: 350) **Links**
Derwent WPIX
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0014708160 *Drawing available*
WPI Acc no: 2005-055768/200506
XRPX Acc No: N2005-048371
Market-neutral pairtrade strategy implementing method using computer, involves calculating financial hedge ratio for pairtrades having high correlation coefficient and de-trend correlation coefficient
Patent Assignee: WESTPORT FINANCIAL LLC (WEST-N)
Inventor: LI B

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6832210	B1	20041214	US 1999149068	P	19990816	200506	B
			US 2000639325	A	20000816		

Priority Applications (no., kind, date): US 1999149068 P 19990816; US 2000639325 A 20000816

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 6832210	B1	EN	13	11	Related to Provisional	US 1999149068

Alerting Abstract US B1

NOVELTY - The time interval in which starting price of a stock, is equal to ending price, is determined. Financial hedge ratio is calculated for pairtrades having high correlation coefficient/de-trend correlation coefficient. The template coefficient between pairtrades, is estimated to select pairtrades which correlate with the stored templates. The templates are optimized to determine optimal cut loss and profit taking boundaries.

DESCRIPTION - An INDEPENDENT CLAIM is also included for computerized trading system implementing market-neutral pairtrade strategy.

USE - For implementing market-neutral pairtrade strategy, using computer.

ADVANTAGE - Enables the implementation of strategy which has a low risk and a high yearly return. Allows the trader to choose a pair of stocks in a manner which is independent from the influence of market trends. Operates with an optimal hedge ratio to achieve an optimal financial hedge.

DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the structure of the strategy implementing system.

Title Terms /Index Terms/Additional Words: MARKET; NEUTRAL; STRATEGY; IMPLEMENT; METHOD ; COMPUTER; CALCULATE; FINANCIAL; HEDGE; RATIO; HIGH; CORRELATE; COEFFICIENT; DE; TREND

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60			Main		"Version 7"

US Classification, Issued: 705036000, 705001000, 705037000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05A2F

7/5/17 (Item 17 from file: 350) **Links**
Derwent WPIX
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0013518874 *Drawing available*
WPI Acc no: 2003-611968/200358

XRPX Acc No: N2003-488086
Network based dynamic goods bid method involves generating weight for each received bid price, and calculating sum of product of optimum value from termination side of node link to each node and corresponding weight
Patent Assignee: NIPPON TELEGRAPH & TELEPHONE CORP (NITE)
Inventor: SUZUKI K; YOKOO M

<div align="center">Patent Family (1 patents, 1 countries)</div>

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2003216598	A	20030731	JP 200216687	A	20020125	200358	B

Priority Applications (no., kind, date): JP 200216687 A 20020125

<div align="center">Patent Details</div>

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2003216598	A	JA	13	16	

Alerting Abstract JP A
NOVELTY - A weight is generated for bid price received from respective goods selling node. The sum of product of optimum value from termination side of node link to each node, and corresponding weight is calculated to determine highest bid price. A mask value generated using sum is sent with sum to operation unit. The size relationship between order of optimum- value and mask value is detected so as to calculate optimal value polynomial.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

1. dynamic goods bid apparatus; and
2. dynamic goods bid program.

USE - For performing bid of multiple goods through network.
ADVANTAGE - Enables obtaining optimal solution without leaking the bid price received from each goods selling node.
DESCRIPTION OF DRAWINGS - The figure shows a flowchart explaining the dynamic goods bid procedure. (Drawing includes non-English language text).

Title Terms /Index Terms/Additional Words: NETWORK; BASED; DYNAMIC; GOODS; BID; METHOD; GENERATE; WEIGHT; RECEIVE; PRICE; CALCULATE; SUM; PRODUCT; OPTIMUM; VALUE; TERMINATE; SIDE; NODE; LINK; CORRESPOND

Class Codes
<div align="center">International Patent Classification</div>

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/10			Main		"Version 7"

G06F-017/17; G06F-019/00			Secondary		"Version 7

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J04D; T01-J05A2F; T01-N01A2A

7/5/27 (Item 27 from file: 350) **Links**
Derwent WPIX

0010771461 *Drawing available*
WPI Acc no: 2001-385923/200141
XRPX Acc No: N2001-283506
Automatic bidding goods determining system for on-line auction, produces gain obtained and goods list for maximum gain based on table which stores goods price, relation and strategy information
Patent Assignee: NEC CORP (NIDE)
Inventor: FUJITA S

Patent Family (2 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2001118011	A	20010427	JP 1999298374	A	19991020	200141	B
JP 3419365	B2	20030623	JP 1999298374	A	19991020	200341	E

Priority Applications (no., kind, date): JP 1999298374 A 19991020

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
JP 2001118011	A	JA	24	25		
JP 3419365	B2	JA	24		Previously issued patent	JP 2001118011

Alerting Abstract JP A
NOVELTY - The system (12) stores input goods strategy information (1), goods relation (2), commercial value, purchase cost (4) and price, in memory (8). A gain calculator (6) computes gain (10) for purchase of desired goods from price, strategy and commercial value information. A strategy calculator (7) produces goods list (11) to attain optimum gain based on output of gain calculator for combination of goods.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

A. Automatic bidding goods determining method;
B. Automatic bid system;

C. Automatic bid procedure;
D. Bid support system;
E. Bid support procedure;
F. Recording medium storing bidding goods determining program

USE - For selecting goods for bidding for on-line auction in internet.
ADVANTAGE - Combination of goods that provide optimum gain to user is determined easily.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the automatic bidding goods determining system. (Drawing includes non-English language text).
1 goods strategy information
2 Goods relation
4 Purchase cost
6 Gain calculator
7 Strategy calculator
8 Memory
10 Gain
11 Goods list
12 Automatic bidding goods determining system

Title Terms /Index Terms/Additional Words: AUTOMATIC; BID; GOODS; DETERMINE; SYSTEM; LINE; AUCTION; PRODUCE; GAIN; OBTAIN; LIST; MAXIMUM; BASED; TABLE; STORAGE; PRICE; RELATED; STRATEGY; INFORMATION

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60; G06F-019/00			Main		"Version 7"

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05A1

7/5/28 (Item 28 from file: 350) **Links**
Derwent WPIX

0009869528 *Drawing available*
WPI Acc no: 2000-165409/200015
XRPX Acc No: N2000-123907
Real time optimization matching apparatus for use in internet for goods advertisement - compares observed behavior and identification of at least one entity vector
Patent Assignee: APTEX SOFTWARE INC (APTE-N)

Inventor: BROWN K B; CAID W R; CARLETON J L; DUNNING T E; JOEL; KINDIG B D; LAZARUS M A; MICHAEL; PUGH R S; RUSSELL G S

Patent Family (2 patents, 2 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2000020555	A	20000121	JP 1998363765	A	19981116	200015	B
US 6134532	A	20001017	US 1997971091	A	19971114	200054	E

Priority Applications (no., kind, date): US 1997971091 A 19971114

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2000020555	A	JA	98	20	

Alerting Abstract JP A
NOVELTY - A converter converts the observed behavior to a vector. A profile adaptor corrects the profile vector by the action vector, and the corrected profile vector is compared with entity vector, which shows an electronic advertisement. Then, the observed behavior and the identification of at least one entity vector, related densely are compared. DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for **real time optimization matching method**.
USE - For use in internet for matching entity such as advertisement, coupon, product, or content of information.
ADVANTAGE - Based on vector space expression which has adaptability in both action, information and behavior, the entity which is objective is chosen individually. DESCRIPTION OF DRAWING(S) - The figure shows functional block diagram illustrating computer environment.

Title Terms /Index Terms/Additional Words: REAL; TIME; MATCH; APPARATUS; GOODS; ADVERTISE; COMPARE; OBSERVE; IDENTIFY; ONE; ENTITY; VECTOR

Class Codes
International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/30; G06F-017/60			Main		"Version 7"
G06F-015/00			Secondary		"Version 7

US Classification, Issued: 705014000, 705001000, 705014000, 705026000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-E01C; T01-H07C5E; T01-J05A; T01-J05B

Derwent WPIX

0008286094 *Drawing available*
WPI Acc no: 1997-395759/199737
XRPX Acc No: N1997-329357
Input pattern sequence matching method for input signal with reference patterns - using pruning threshold to restrict number of possible matchings which propagate further, and is varied to ensure that number of possible matchings propagated at each time point remains bounded within predefined limits
Patent Assignee: CANON KK (CANO)
Inventor: ERI T; TZIRKEL-HANCOCK E

Patent Family (5 patents, 5 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
EP 789348	A1	19970813	EP 1997300777	A	19970207	199737	B
JP 9230888	A	19970905	JP 199726971	A	19970210	199746	E
US 5907824	A	19990525	US 1997794449	A	19970204	199928	E
EP 789348	B1	20020123	EP 1997300777	A	19970207	200207	E
DE 69709965	E	20020314	DE 69709965	A	19970207	200226	E
			EP 1997300777	A	19970207		

Priority Applications (no., kind, date): EP 1997300777 A 19970207; GB 19962700 A 19960209

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
EP 789348	A1	EN	53	35		
Regional Designated States,Original	DE FR GB IT					
JP 9230888	A	JA	36			
EP 789348	B1	EN				
Regional Designated States,Original	DE FR GB IT					
DE 69709965	E	DE			Application	EP 1997300777
					Based on OPI patent	EP 789348

Alerting Abstract EP A1
The method involves using a pruning threshold (Th) to restrict the number of possible matchings (PACOUNT) which propagate further. The method is varied to ensure that number of possible matchings propagated at each time point remains bounded within predefined limits.
The limits are dictated by the amount of working memory and the processing time available. It is decided whether to increase or decrease the pruning threshold, by comparing the number of possible matchings which could be

propagated from a current time point to a succeeding time point, with a matching threshold (STATETH).
USE/ADVANTAGE - For adjusting pruning threshold used in dynamic programming pattern matching technique used in speech recognition system. Provides simpler and less computationally expensive solution.

Title Terms /Index Terms/Additional Words: INPUT; PATTERN; SEQUENCE; MATCH; METHOD; SIGNAL; REFERENCE; PRUNE; THRESHOLD; RESTRICT; NUMBER; POSSIBILITY; PROPAGATE; VARY; ENSURE; TIME; POINT; REMAINING; BOUND; PREDEFINED; LIMIT

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G10L-015/12; G10L-003/00; G10L-005/06			Main		"Version 7"

US Classification, Issued: 704242000

File Segment: EngPI; EPI;
DWPI Class: T01; W04; P86
Manual Codes (EPI/S-X): T01-J18; W04-V01

7/5/31 (Item 1 from file: 347) **Links**
JAPIO
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07214732 **Image available**
AUCTION SYSTEM VIA INTERNET

Pub. No.: 2002-083170 [JP 2002083170 A]
Published: March 22, 2002 (20020322)
Inventor: TAKAHASHI YOICHI
        KOBAYASHI TOSHIAKI
Applicant: D PAO KK
Application No.: 2000-269200 [JP 2000269200]
Filed: September 05, 2000 (20000905)
International Class: G06F-017/60

ABSTRACT

PROBLEM TO BE SOLVED: To solve a problem that the possibility of a successful bid is not determined until a bid time limit comes even when bidding a desired article.service in a conventional auction system, and that inconvenience of accessing a bid site frequently during a bidding period is required to know whether other person bids the **maximum value** after offering or not.

propagated from a current time point to a succeeding time point, with a matching threshold (STATETH). USE/ADVANTAGE - For adjusting pruning threshold used in dynamic programming pattern matching technique used in speech recognition system. Provides simpler and less computationally expensive solution.

Title Terms /Index Terms/Additional Words: INPUT; PATTERN; SEQUENCE; MATCH; METHOD; SIGNAL; REFERENCE; PRUNE; THRESHOLD; RESTRICT; NUMBER; POSSIBILITY; PROPAGATE; VARY; ENSURE; TIME; POINT; REMAINING; BOUND; PREDEFINED; LIMIT

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G10L-015/12; G10L-003/00; G10L-005/06			Main		"Version 7"

US Classification, Issued: 704242000

File Segment: EngPI; EPI;
DWPI Class: T01; W04; P86
Manual Codes (EPI/S-X): T01-J18; W04-V01

7/5/31 (Item 1 from file: 347) **Links**
JAPIO
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07214732 **Image available**
AUCTION SYSTEM VIA INTERNET

Pub. No.: 2002-083170 [JP 2002083170 A]
Published: March 22, 2002 (20020322)
Inventor: TAKAHASHI YOICHI
         KOBAYASHI TOSHIAKI
Applicant: D PAO KK
Application No.: 2000-269200 [JP 2000269200]
Filed: September 05, 2000 (20000905)
International Class: G06F-017/60

ABSTRACT

PROBLEM TO BE SOLVED: To solve a problem that the possibility of a successful bid is not determined until a bid time limit comes even when bidding a desired article.service in a conventional auction system, and that inconvenience of accessing a bid site frequently during a bidding period is required to know whether other person bids the **maximum value** after offering or not.

SOLUTION: In this auction system, a user member is able to conduct an input operation easily to an auction system using a personal handy phone system, to receive a bid receipt response mail **immediately** from the **auction system** to be confirmed, and to receive a notifying mail immediately when the maximum bidding amount of money is updated by the other person, and the auction system is provided with an automatic bidding value setting means and an automatic bidding-up offering means.

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0015842361 *Drawing available*
WPI Acc no: 2006-039100/200604
XRPX Acc No: N2006-033452
Database management system's configuration value optimizing method, involves carrying out multivariate regression analysis on results of experiments, to identify the parameter, and optimizing value of identified parameter
Patent Assignee: BUTLER M J (BUTL-I); PATTERN RECOGNITION SYSTEMS AG (PATT-N); TORKILDSEN J E (TORK-I); VATNOY G (VATN-I)
Inventor: ARNEBERG R; KVALHEIM O; TORKILDSEN J E; VATNOY G

Patent Family (1 patents, 109 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2005116871	A1	20051208	WO 2005GB2147	A	20050531	200604	B

Priority Applications (no., kind, date): GB 200412068 A 20040528

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing	Notes
WO 2005116871	A1	EN	57	7		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KM KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NG NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SM SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IS IT KE LS LT LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					

Alerting Abstract WO A1

NOVELTY - The method involves selecting a number of a configuration parameters and each configuration parameter has a value within a range of maximum and minimum values. A multivariate regression analysis is carried out on results of experiments in a design of experiments, to identify the parameter which has a significant effect on target database performance. A value of the identified parameter is optimized.

DESCRIPTION - An INDEPENDENT CLAIM is also included for a data processing system for providing data for use in optimizing values of configuration parameters of a database management system.

USE - Used for optimizing a database management system's e.g. oracle and Microsoft structured Query language (SQL) server, configuration value.

ADVANTAGE - The design of experiments (DOE) methodology eliminates the directly test every possible factor combination, thus reducing experimenters time and money with higher precision, and hence increasing multivariate design efficiency.

DESCRIPTION OF DRAWINGS - The drawing shows a test environment of a data processing system.

1 Database sever

2 Operating system

5 Network

6 Test client

7 Load client

Title Terms /Index Terms/Additional Words: DATABASE; MANAGEMENT; SYSTEM; CONFIGURATION; VALUE; OPTIMUM; METHOD; CARRY; REGRESSION; ANALYSE; RESULT; EXPERIMENT; IDENTIFY; PARAMETER

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/30			Main		"Version 7"

File Segment: EPI;

DWPI Class: T01

Manual Codes (EPI/S-X): T01-J05B3; T01-J05B4M; T01-J16C6

17/5/2 (Item 2 from file: 350) **Links**

Derwent WPIX

0014882895 *Drawing available*

WPI Acc no: 2005-230634/200524

Related WPI Acc No: 2006-180795

XRPX Acc No: N2005-189784

Computerized spread-maximizing trading system for multi-attribute product e.g. travel package, finds spread-maximizing product from several products, based on spread having largest difference between true values of buyer/seller

Patent Assignee: NEHANET CORP (NEHA-N)

Inventor: CONDAMOOR R V; SHARMA A D; SUNDARESAN N

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 6868400	B1	20050315	US 2000578174	A	20000524	200524	B
			US 2000578192	A	20000524		
			US 2000610903	A	20000706		

Priority Applications (no., kind, date): US 2000578192 A 20000524; US 2000578174 A 20000524; US 2000610903 A 20000706

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 6868400	B1	EN	27	14	C-I-P of application	US 2000578174
					C-I-P of application	US 2000578192

Alerting Abstract US B1
NOVELTY - A trading manager finds a spread-maximizing product from the multi-attribute products, by finding the spread having the largest difference between the true values of the buyer and seller. The manager notifies information related to combination of attribute values specifying the spread-maximizing product, to the buyer.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

3. computer-implemented method for trading multi-attribute products; and
4. computer program product for trading multi-attribute products.

USE - For trading multi-attribute product such as travel package.
ADVANTAGE - Provides a neutral trading system which is not biased towards the buyer and seller.
DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the spread-maximizing multi-attribute trading system.

Title Terms /Index Terms/Additional Words: COMPUTER; SPREAD; MAXIMISE; TRADE; SYSTEM; MULTI; ATTRIBUTE; PRODUCT; TRAVEL; PACKAGE; FIND; BASED; DIFFER; TRUE; VALUE; BUY

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60			Main		"Version 7"

US Classification, Issued: 705037000

File Segment: EPI;
DWPI Class: T01

Manual Codes (EPI/S-X): T01-N01A2B; T01-S03

17/5/3 (Item 3 from file: 350) **Links**
Derwent WPIX

0014854192 *Drawing available*
WPI Acc no: 2005-201896/200521
XRPX Acc No: N2005-166170
Financial product e.g. insurance, and inventory optimization creating method, involves creating financial product and optimization if quasi-fungibility degree of one of alternative good, service and combination meets preset level
Patent Assignee: LEISTNER G (LEIS-I)
Inventor: LEISTNER G

Patent Family (3 patents, 107 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20050044026	A1	20050224	US 2003495937	P	20030818	200521	B
			US 2004921744	A	20040818		
WO 2005020018	A2	20050303	WO 2004US26960	A	20040818	200521	E
EP 1656601	A2	20060517	EP 2004781615	A	20040818	200634	E
			WO 2004US26960	A	20040818		

Priority Applications (no., kind, date): US 2003495937 P 20030818; US 2004921744 A 20040818

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
US 20050044026	A1	EN	57	21	Related to Provisional	US 2003495937
WO 2005020018	A2	EN				
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BW BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE EG ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NA NI NO NZ OM PG PH PL PT RO RU SC SD SE SG SK SL SY TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW					
Regional Designated States,Original	AT BE BG BW CH CY CZ DE DK EA EE ES FI FR GB GH GM GR HU IE IT KE LS LU MC MW MZ NA NL OA PL PT RO SD SE SI SK SL SZ TR TZ UG ZM ZW					
EP 1656601	A2	EN			PCT Application	WO 2004US26960
					Based on OPI patent	WO 2005020018
Regional Designated States,Original	AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LI LT LU LV MC MK NL PL PT RO SE SI SK TR					

Alerting Abstract US A1

NOVELTY - The method involves specifying one of a reference use, specification and combination of one of a reference good, service and combination. One of an alternative good, service and combination analogous to one of the reference good, service and combination is identified. A financial product and inventory optimization is created if a quasi-fungibility degree of one of alternative good, service and combination meets a preset level.

DESCRIPTION - An INDEPENDENT CLAIM is also included for a system to create a financial instrument from one of a good, service and combination based on quasi-fungibility.

USE - Used for creating a financial product e.g. repurchase agreement and reverse repurchase agreement, insurance, warehouse receipt, futures, forwards, option, structured note, indices, securities, options and mesoeconomic and macroeconomic swaps, and inventory optimization.

ADVANTAGE - The method creates financial products to enhance the liquidity of trade in the cash market by allowing for easy borrowing and lending under repurchase and reverse repurchase methods from a defined subset or entire set of fungible parts to underpin short selling. The method allows dealers and manufacturers to borrow specific parts or groups of parts for financing under `repo` and `reverse repo` regimes according to quasi-fungibility to allow the establishment of true short positions by market participants.

DESCRIPTION OF DRAWINGS - The drawing shows an upper level block diagram of the components for implementing a method of creating a financial product and inventory optimization.

200Financial products originator

210Financial instrument machine

220Financial instrument machine services subscriber

230Market dynamics

380.1-380.MUser and Subscriber good/service/outcome/event sites or datacenters

Title Terms /Index Terms/Additional Words: FINANCIAL; PRODUCT; INSURANCE; INVENTORY; OPTIMUM; METHOD; QUASI; DEGREE; ONE; ALTERNATIVE; SERVICE; COMBINATION; PRESET; LEVEL

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60; G06F			Main		"Version 7"
G06F-0001/00	A	I	F	B	19680901

US Classification, Issued: 705035000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05A1; T01-J05A2E; T01-J05A2F; T01-N01A1; T01-N01A2A; T01-N01A2F; T01-N01A2J

17/5/5 (Item 5 from file: 350) **Links**

Derwent WPIX

0014363389
WPI Acc no: 2004-552083/200453
XRPX Acc No: N2004-436754
Advertising method in website, involves classifying advertisement promoters with similar hits history, into groups based on their business size
Patent Assignee: CHANG D (CHAN-I)
Inventor: CHANG D

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20040133469	A1	20040708	US 2003605894	A	20031104	200453	B

Priority Applications (no., kind, date): US 2003605894 A 20031104

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20040133469	A1	EN	8	0	

Alerting Abstract US A1
NOVELTY - Advertisement promoters with similar hits history are classified into groups based on their business size. The promoters with higher hits history are charged higher price for their ad to be listed. When the promoters reach the top price to keep their ad listed, the ad is unlisted for short period and listed again at the minimum entry fee.
USE - For publishing ads on specific product or service of interest, on website.
ADVANTAGE - Prevents over-delivery of advertising through search result listings and possible overbilling of the advertiser.

Title Terms/Index Terms/Additional Words: ADVERTISE; METHOD; CLASSIFY; PROMOTE; SIMILAR; HIT; HISTORY; GROUP; BASED; BUSINESS; SIZE

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60			Main		"Version 7"

US Classification, Issued: 705014000

File Segment: EPI;
DWPI Class: T01

17/5/6 (Item 6 from file: 350) <u>Links</u>
Derwent WPIX

0014090104 *Drawing available*
WPI Acc no: 2004-273791/200426
XRPX Acc No: N2004-216527
Multiple goods network auction method involves selecting highest evaluation value based on number of goods and sum of reservation price of individual goods, in one arbitrary combination of goods
Patent Assignee: NIPPON TELEGRAPH & TELEPHONE CORP (NITE)
Inventor: SAKURAI Y; YOKOO M

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 2004062387	A	20040226	JP 2002218002	A	20020726	200426	B

Priority Applications (no., kind, date): JP 2002218002 A 20020726

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2004062387	A	JA	10	3	

Alerting Abstract JP A
NOVELTY - The evaluation value set by each tenderer for arbitrary combination of goods and number of individual goods, is received. A highest evaluation value is selected based on number of the goods and sum of reservation price of individual goods in a combination. The selected value is notified to tenderer.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

5.   multiple goods network auction apparatus;
6.   multiple goods network auction program; and
7.   recorded medium storing multiple goods network auction program.

USE - For auction of multiple goods through communication network.
ADVANTAGE - A true market value is notified by setting the reservation price of each goods for seller.
DESCRIPTION OF DRAWINGS - The figure shows the flowchart illustrating the network auction of multiple goods. (Drawing includes non-English language text).

Title Terms /Index Terms/Additional Words: MULTIPLE; GOODS; NETWORK; AUCTION; METHOD;

SELECT; HIGH; EVALUATE; VALUE; BASED; NUMBER; SUM; RESERVE; PRICE; INDIVIDUAL; ONE; ARBITRARY; COMBINATION

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60			Main		"Version 7"

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-N01A2A; T01-S03

17/5/7 (Item 7 from file: 350) **Links**
Derwent WPIX
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0013616712 *Drawing available*
WPI Acc no: 2003-712067/200367
XRPX Acc No: N2003-569610
Parallel return on investments estimation method for investment decision support in e.g. computer software development, involves estimating new optimal price and changing cost, demand models according to each project combination
Patent Assignee: LAURIE S P (LAUR-I)
Inventor: LAURIE S P

Patent Family (1 patents, 1 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
US 20030177080	A1	20030918	US 200298692	A	20020315	200367	B

Priority Applications (no., kind, date): US 200298692 A 20020315

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
US 20030177080	A1	EN	18	7	

Alerting Abstract US A1
NOVELTY - The possible candidate investment project combinations are formed and the projects that do not meet the set of constraints, are eliminated. A new optimal price is determined and cost and demand models for each product for each project combination, are determined and added to estimate its value. The project combination having maximum value is identified. The output containing estimated value and identified project combination, is

produced.
DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

8. computer-readable medium encoded with software for determining parallel return on investment; and
9. system for determining parallel return on investment.

USE - For estimating parallel return on investment for investment decision support in development of computer software, products, etc.
ADVANTAGE - Enables an organization to evaluate returns from various project combinations, thereby allowing the organization to select the combination which offers the greatest return. Enables company to identify additional areas for profitable investments which result in greater efficiency and improves the competition among companies.
DESCRIPTION OF DRAWINGS - The figure shows the flowchart explaining the logical process for determining return on investment.

Title Terms /Index Terms/Additional Words: PARALLEL; RETURN; ESTIMATE; METHOD; INVESTMENT; DECIDE; SUPPORT; COMPUTER; SOFTWARE; DEVELOP; NEW; OPTIMUM; PRICE; CHANGE; COST; DEMAND; MODEL; ACCORD; PROJECT; COMBINATION

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60			Main		"Version 7"

US Classification, Issued: 705036000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05A2C; T01-J05A2E; T01-S03

17/5/10 (Item 10 from file: 350) **Links**
Derwent WPIX
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0011007391   *Drawing available*
WPI Acc no: 2001-632813/200173
XRPX Acc No: N2001-472656
Odds data display method for public game, involves producing list display of calculated maximum and minimum values of single and combination of votes for first three places
Patent Assignee: CHUO DENSHI KK (CHUO-N); NIPPON TOTA KK (NITO-N)
Inventor: MATSUMOTO A; NAKAMURA H; SUZUKI H

Patent Family (1 patents, 1 countries)

Application

Patent Number	Kind	Date		Kind	Date	Update	Type
JP 2001243394	A	20010907	JP 200056168	A	20000301	200173	B

Priority Applications (no., kind, date): JP 200056168 A 20000301

Patent Details						
Patent Number	Kind	Lan	Pgs	Draw	Filing Notes
JP 2001243394	A	JA	4	2	

Alerting Abstract JP A

NOVELTY - A calculator calculates a minimum value and a maximum value for odds data for individual first place votes, a combination of votes for second and third places. The calculated odds data are displayed as a list.
USE - For producing list display of odds data in public games.
ADVANTAGE - Odd data is found easily by displaying the calculated minimum and maximum values in a list form.

DESCRIPTION OF DRAWINGS - The figure shows a list display of odds data. (Drawing includes non-English language text).

Title Terms /Index Terms/Additional Words: ODD; DATA; DISPLAY; METHOD; PUBLIC; GAME; PRODUCE; LIST; CALCULATE; MAXIMUM; MINIMUM; VALUE; SINGLE; COMBINATION; VOTE; FIRST; THREE; PLACE

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-019/00			Main		"Version 7"

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J

17/5/11 (Item 11 from file: 350) **Links**
Derwent WPIX
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0010978114 *Drawing available*
WPI Acc no: 2001-602376/200168
XRPX Acc No: N2001-449515
Processor-assisted method for selecting a sales channel for a specific item analyzing variables such as expected costs, sales items and market, and third party and/or internal data
Patent Assignee: DAVIS M A (DAVI-I); NARDELLA M (NARD-I); RETURNBUY INC (RETU-N); ROGERS J S (ROGE-I); SNAPP L (SNAP-I)
Inventor: DAVIS M A; NARDELLA M; NARDELLA M A; ROGERS J; ROGERS J S; SNAPP L; SNAPP L A

Patent Family (4 patents, 91 countries)

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
WO 2001059668	A1	20010816	WO 2001US4247	A	20010209	200168	B
AU 200136836	A	20010820	AU 200136836	A	20010209	200175	E
US 20030233246	A1	20031218	WO 2001US4247	A	20010209	200401	E
			US 2003203542	A	20030321		
MX 2002007731	A1	20041001	WO 2001US4247	A	20010209	200557	E
			MX 20027731	A	20020809		

Priority Applications (no., kind, date): US 2000560812 A 20000428; US 2000185713 P 20000229; US 2000181931 P 20000211; US 2000579464 A 20000526

Patent Details

Patent Number	Kind	Lan	Pgs	Draw	Filing Notes	
WO 2001059668	A1	EN	91	6		
National Designated States,Original	AE AG AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW					
Regional Designated States,Original	AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW					
AU 200136836	A	EN			Based on OPI patent	WO 2001059668
US 20030233246	A1	EN			PCT Application	WO 2001US4247
MX 2002007731	A1	ES			PCT Application	WO 2001US4247
					Based on OPI patent	WO 2001059668

Alerting Abstract WO A1
NOVELTY - The method involves identifying each possible combination of channel values and item values for a set of items. The set is associated with one or more channel variables, each channel variable having several channel values. The set is also associated with several item variables, each item variable has several item values. A statistically determined expected cost is compared with a processor to a statistically determined expected benefit of each possible combination to determine an optimal combination. A specific item is offered for sale on a channel having the channel values of the optimal combination.
The set of items is identified. The set of items is associated with the one or more channel variables. The set of items are associated with the one or more item variables.
DESCRIPTION - INDEPENDENT CLAIMS are included for a computer-readable medium storing instructions for activities, for an appts. for selecting variables to identify an item, for a method for providing a description of an item, for an appts. for providing a description of an item, for a method for providing a description of a returned item, for a method for managing reverse logistics for items and for a method for re-selling previously purchased goods.
USE - For selecting a sales channel.
ADVANTAGE - Better returns management allows initial prices to consumer to be cheaper and ensures that fewer items end up as waste in landfill sites.
DESCRIPTION OF DRAWINGS - The figure shows a flowchart of the method.

Title Terms /Index Terms/Additional Words: PROCESSOR; ASSIST; METHOD; SELECT; SALE; CHANNEL; SPECIFIC; ITEM; VARIABLE; COST; MARKET; THIRD; PARTY; INTERNAL; DATA

Class Codes

International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
G06F-017/60			Main		"Version 7"

US Classification, Issued: 705001000

File Segment: EPI;
DWPI Class: T01
Manual Codes (EPI/S-X): T01-J05A2; T01-S03

07429438 **Image available**
GOODS COMBINATION DETERMINING METHOD IN BIDDING, ITS DEVICE, ITS PROGRAM AND ITS RECORDING MEDIUM

ABSTRACT

PROBLEM TO BE SOLVED: To determine a dividing set with a level used for a bid opening method robust against bidding of a false name so as to obtain a good social surplus.

SOLUTION: A goods aggregate (a bundle) having the possibility of bidding and the probability distribution of respective bundles to the highest bitting value are predetermined. Supposing the highest value is bidden, a combination (divided D) of bundles becoming maximum in the sum of an expected value of the highest bidding value is determined (S1). This is added to the dividing set of a level 3. The whole divided D' composed of its n-1 pieces is formed of n piece of bundles for constituting the divided D. These are added to the dividing set of a level 2 (S2). The whole divided D" composed of two bundles by dividing goods for constituting the divided D into two parts is formed. The D" is added to the dividing set of the level 2 (S3).

? show files

; d s
```
Set      Items    Description
S1      1845389   S AUTOMATIC???? OR SELECTIVELY OR DYNAMIC??? OR REAL()TIME OR REALTIME OR
ADAPTABL? OR ALTERABL? OR ALTERNAT? OR CHANGEABL? OR CONVERTIBL? OR ADJUSTABL? OR FLEXIB?
OR IMMEDIATE? OR INSTANT? OR INTERACTIV? OR ITERAT? OR MODIFIABL? OR ON(1W)FLY OR
SIMULTANEOUS? OR SYNCHRONOUS? OR UP(1W)DATE OR UP(2W)MINUTE OR UPDATE?
S2       888060   S AUCTION? ? OR MULTIAUCTION OR MULTI()AUCTION OR EXCHANGE OR INTERCHANGE
OR MARKET OR NETWORK OR SITE OR TRADING OR MATCHING OR BID OR BIDS OR BIDDING OR OFFER OR
OFFERS OR EQUILIBRIUM OR CALCULATOR OR (COMPETITIVE OR COUNTER)()(OFFER? OR BID???) OR
COUNTEROFFER?
S3      2507478   S PLAN? ? OR MODEL? ? OR STRATEG??? OR DESIGN? ? OR METHOD? ? OR
BLUEPRINT? ? OR LAYOUT? ? OR SYSTEM? ? OR SCHEME? ? OR PROCEDURE? ?
S4       220046   S OPTIMI?ATION OR COMBINED()VALUE OR (OPTIM??? OR OPTIMI?ATION OR
SUB()OBTIM BEST OR GREATEST OR BIGGEST OR MOST OR LARGEST OR MAXIM??? OR TOP OR FAVORABLE
OR FAVOURABLE OR HIGHEST OR POSITIVE)(3N)(RETURN? ? OR WORTH OR VALUE? ? OR GAIN? ? OR
EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR MARGIN? ?)
S5        20214   S (COMBINATION? ? OR COMBINATORIAL OR COMBINATIONAL)(3N)(RETURN? ? OR
WORTH OR VALUE? ? OR GAIN? ? OR EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR
PROCEEDS OR MARGIN? ? OR GOOD? ?)
S6        35861   S IC=(G06F-019/00 OR G06F-015/02 OR G06F-017/60)
S7       182008   S IC=(G06F)
S8        33425   S S1 (2W) S2
S9         4857   S S8 (3N) S3
S10         117   S S9 (S) S4
S11          30   S S10 AND S6
S12          30   IDPAT (sorted in duplicate/non-duplicate order)
S13          30   IDPAT (primary/non-duplicate records only)
S14        1685   S S5 (S) S4
S15          80   S S14 AND S6
S16          30   S S15 (S) S2
S17          28   S S16 NOT S13
S18          28   IDPAT (sorted in duplicate/non-duplicate order)
S19          28   IDPAT (primary/non-duplicate records only)
```

01241451
SYSTEM AND METHOD FOR A HIBRID CLOCK AND PROXY AUCTION
SYSTEME ET PROCEDE POUR UNE VENTE HYBRIDE AU CADRAN ET PAR PROCURATION

Patent Applicant/Patent Assignee:

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  (For all designated states except: US)
- **AUSUBEL Lawrence M**; 2920 Garfield Terrace NW, Washington, DC 20008
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  .(Designated only for: US)
- **MILGROM Paul R**; 903 Cottrel Way, Stanford, CA 94305
  US; US(Residence); US(Nationality)
  (Designated only for: US)
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  US; US(Residence); US(Nationality)
  (Designated only for: US)

Patent Applicant/Inventor:

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  903 Cottrel Way, Stanford, CA 94305; US; US(Residence); US(Nationality); (Designated only for: US)
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Legal Representative:

- **GREEN Stanley B**
  (et al)(agent); Connolly Bove Lodge & Hutz LLP, 1990 M Street, N.W., Suite 800, Washington, DC
  20036-3425; US

	Country	Number	Kind	Date
Patent	WO	200548058	A2-A3	20050526
Application	WO	2004US37037		20041108
Priorities	US	2003517380		20031106

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)
AE; AG; AL; AM; AT; AU; AZ; BA; BB; BG;
BR; BW; BY; BZ; CA; CH; CN; CO; CR; CU;

CZ; DE; DK; DM; DZ; EC; EE; EG; ES; FI;
GB; GD; GE; GH; GM; HR; HU; ID; IL; IN;
IS; JP; KE; KG; KP; KR; KZ; LC; LK; LR;
LS; LT; LU; LV; MA; MD; MG; MK; MN; MW;
MX; MZ; NA; NI; NO; NZ; OM; PG; PH; PL;
PT; RO; RU; SC; SD; SE; SG; SK; SL; SY;
TJ; TM; TN; TR; TT; TZ; UA; UG; US; UZ;
VC; VN; YU; ZA; ZM; ZW;

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IS; IT; LU; MC;
NL; PL; PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] BW; GH; GM; KE; LS; MW; MZ; NA; SD; SL;
SZ; TZ; UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main
G06F-017/60	Main

Publication Language: English
Filing Language:　　　English
Fulltext word count:　29184

English Abstract:

The present invention is a system and method for a computer-implemented auction wherein a hybrid auction combining elements of a clock auction and a proxy auction. In particular, if the earlier phase (104) is a clock auction and the later phase (108) is a proxy auction, then the resulting hybrid auction will combine the transparency and the simplicity of the clock auction with the efficiency outcome and competitive revenues of the proxy auction. The system includes receiving bids (118), determining an outcome (134) and outputting the results (136).

French Abstract:

La presente invention concerne une amelioration apportee a des ventes mises en oeuvre par ordinateur et plus particulierement la mise en oeuvre par ordinateur d'une vente hybride combinant des elements d'une vente au cadran et d'une vente par procuration.

Type	Pub. Date	Kind	Text
Publication	20050526	A2	Without international search report and to be republished upon receipt of that report.
Search Rpt	20051222		Late publication of international search report
Republication	20051222	A3	With international search report.

Republication	20051222	A3	Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Examination	20060518		Request for preliminary examination prior to end of 19th month from priority date

Detailed Description:

...be bid for the package. The auctioneer then selects provisionally-winning bids by solving the **optimization** problem of selecting bids, at most one from each bidder, that **optimize revenues** subject to a feasibility constraint. Proxy agents for bidders who are not selected as provisional... ...have no profitable bids remaining to be placed. (For a longer discussion, see "System and **Method** for a **Dynamic Auction** with Package Bidding," International Patent Application No. US01/43838.)
Summary of the Invention
The present...

13/5K/8 (Item 8 from file: 349) **Links**
PCT FULLTEXT
01059097
COMPUTERIZED TRADING SYSTEM AND METHOD USEFUL THEREFOR
SYSTEME DE TRANSACTIONS COMMERCIALES INFORMATISE ET PROCEDE UTILISE A CET EFFET

Patent Applicant/Inventor:

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  12646 Montana Avenuee, #8, Los Angeles, CA 90049; US; US(Residence); IL(Nationality);
- **SETTON Guy**
  54A Tudor Close, London, NW3 4AG; GB; GB(Residence); IL(Nationality);

Legal Representative:

- **SANFORD T Colb & Co(et al)(agent)**
  P.O Box 2273, 76122 Rehovot; IL;

	Country	Number	Kind	Date
Patent	WO	200387974	A2-A3	20031023
Application	WO	2003IL296		20030408
Priorities	US	2002371454		20020409

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;

FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;
PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 29975

English Abstract:

A computerized trading system (Fig. 1) includes a price information cache including a pluraality of price information items originating from more than one transaction queries posed by more than one trader from among a population of traders, each of the price information items having a cached life cycle (Fig. 9), and a trading query processor operative to receive trading queries from the population of traders and to employ the price information cache in responding thereto.

French Abstract:

La presente invention concerne un systeme de transactions commerciales informatise comprenant : une memoire cache d'informations sur les prix qui comporte une multiplicite d'articles d'informations sur les prix emanant d'au moins une demande de transaction presentee par au moins un negociant parmi une population de negociants, chacun des articles d'informations sur les prix possedant un cycle de vie en memoire cache ; et un processeur de demandes de transactions commerciales qui sert a recevoir les demandes de transactions commerciales en provenance de la population de negociants et a employer la memoire cache d'informations sur les prix pour repondre a ces demandes.

Type	Pub. Date	Kind	Text
Publication	20031023	A2	Without international search report and to be republished upon receipt of that report.
Search Rpt	20040603		Late publication of international search report
Republication	20040603	A3	With international search report.
Republication	20040603	A3	Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Examination	20040624		Request for preliminary examination prior to end of 19th month from priority date

Claims:

...process starts once the candidate list has been
determined. Step 2061 finds the minimum and **maximum values** for each parameter52amongst all candidates.
These values may be used in process of... ...21. In order to normalize the candidates being considered, the Trading
system detern-@iines the**maximum** and minimum **value** for each parameter under consideration, Thedetermination
of the **maximum** and minimum parameter **values** is done by searching through the list item by item and checking if
its parameter **values** are beyond the **maximum values** determined to that point. The **maximum** and minimum
values once determined are stored for use in the recommendation computation process.Step 2070 loads the... ...the
parameter is within the thresholds then check if it is a new minimum or **maximum**. If the parameter **value** is below
the minimum then a new minimum has been found. The parameter value is then stored as the new minimum.
Likewise, if the parameter **value** is above the **maximum** it becomes the new maximum. In step 2074, minimum and
maximum values are held in a temporary storage buffer. Step 2076nochecks if the current candidate... ...the next
step of the process.In step 2078, the determination of the minimum and **maximum values** foreach parameter has
been completed. The process continues to the computation of the raw... ...from a temporary storage location, having
been loaded during the previous check for minimum and **maximum values**, shown in Fig. 22. The same is true for
the thresholds.In step 2102, branching ...field contains a reference to the source of such data. In the case of
single-**valued** parameters, the **most** recent **value** is read. In step 2114, single-valued parameters are read directly
from the data source referenced in the RecParameterSource field of Table XXX, with the **most** recent **value** used. In
step 2115, for trend parameters all data values for the specified time period... ...Dreferred method for implementing
step 2063 of Fig. 21. Fig. 27 describes the minimum and **maximum** computations for parameter **values**.Step 2130
loads the previously computed minimum and **maximum values**for each parameter. These may be used to provide
the range within which the parameters... ...against the ProdMarketPrice field, although this information may come
from an external source or be **updated** by a **Trading system** operator.Step 2146 determines the past quantities of a
product that were involvedin transactions...

13/5K/10 (Item 10 from file: 349) <u>Links</u>
PCT FULLTEXT ·
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00994559
**DIGITAL OPTIONS HAVING DEMAND-BASED, ADJUSTABLE RETURNS, AND TRADING
EXCHANGE THEREFOR**
OPTIONS NUMERIQUES A RETOURS AJUSTABLES BASEES SUR LA DEMANDE ET BOURSE
D'ECHANGES COMMERCIAUX AFFERENTE

Patent Applicant/Patent Assignee:

• **LONGITUDE INC**; 650 Fifth Avenue, New York, NY 10019
  US; US(Residence); US(Nationality)

Legal Representative:

• **WEISS Charles A(et al)(agent)**

Kenyon & Kenyon, One Broadway, New York, NY 10004; US;

	Country	Number	Kind	Date
Patent	WO	200323575	A2-A3	20030320
Application	WO	2002US30309		20020909
Priorities	US	2001950498		20010910

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; IE; IT; LU; MC; NL; PT;
SE; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 122079

English Abstract:

Methods and systems for conducting demand-based trading are described. In one embodiment, states are established, each state corresponding to at least one possible outcome of an event (264) of economic significance. An investment amount may be determined as a function of a selected outcome, a desired payout (266), and a total amount invested in the states (264). In another embodiment, an investment amount may be determined as a function of parameters of a financial product. In another embodiment, a payout may be determined as a function of an investment amount, a selected outcome, a total amount invested in the states, and an identification of a state corresponding to an observed outcome (263) of the event.

French Abstract:

L'invention concerne des procedes et des systemes permettant d'effectuer des echanges commerciaux bases sur la demande. Dans un mode de realisation, des etats sont etablis, chaque etat correspondant a au moins un resultat possible d'un evenement a signification economique. Un montant d'investissement peut etre determine en fonction d'un resultat selectionne, un reglement voulu, et un montant total investi dans les etats. Dans un autre mode de realisation, un montant d'investissement peut etre determine en fonction de parametres d'un produit financier. Dans un autre mode de realisation, un reglement peut etre determine en fonction d'un montant d'investissement, d'un resultat selectionne, d'un montant total investi dans les etats, et d'une identification d'un etat correspondant a un

resultat observe de l'evenement.

Type	Pub. Date	Kind	Text
Publication	20030320	A2	Without international search report and to be republished upon receipt of that report.
Examination	20031002		Request for preliminary examination prior to end of 19th month from priority date
Search Rpt	20051020		Late publication of international search report
Republication	20051020	A3	With international search report.

Claims:

...occurred upon fulfillment of all of the termination criteria. An additional preferred embodiment of a **method** for conducting demand-based **trading** also includes establishing, accepting, and allocating steps. The establishing step in this embodiment includes establishing ...or the Credit-Capital-At-Risk Historical Simulation method. - 17 In preferred embodiments of a **method** for conducting demand-based **trading** of
rn Inthe present invention, at least one investment of value units is a...set of simultaneous equations as the selected equation; and (f) sequentially performing the calculating the **value** step, the assigning the calculated **value** step, and the designating an equation step until the **value** of each of the variables converges. A preferred embodiment of a method for estimating state...plurality of defined states and a plurality of predetermined termination criteria, wherein an investment of **value** units by each of a plurality of traders is accepted in at least one of...of hedging. The hedging step includes the hedging of a trader's previous investment of **value** units by makinar a new investment of value units in one or more of the...

13/5K/13 (Item 13 from file: 349) <u>Links</u>
PCT FULLTEXT
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00873759
SYSTEM AND METHOD FOR PHYSICALS COMMODITY TRADING
SYSTEME ET PROCEDE POUR NEGOCIER DES MARCHANDISES REELLES

Patent Applicant/Inventor:

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Legal Representative:

- **DE ETIENNE-CUMMINGS Shamita(agent)**
  McDermott, Will & Emery, 600 13th Street N.W., Washington, DC 20005-3096; US;

	Country	Number	Kind	Date
Patent	WO	200206921	A2-A3	20020124
Application	WO	2001US22534		20010718

Priorities	US	2000219023		20000718

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 13035

English Abstract:

A method and system for an electronic commodities trading marketplace along with ancillary tools provide an electronic trading center (400) for world market commodity importers, exporters, and the intermediaries and processors between them. This trading center is offered through its website centered around a 24-hour exchange that provides trading markets for commodities such as coffee, sugar, cocoa and cotton. The scalable system provides aggregated third party services linked to both front and back office operations. These services can include items such as live futures quotes (414) and real-time news (404), futures brokerage (410), banking and finance links (420) and resources, and a suite of applications tailored to members' specific risk-management and end-to-end contract execution needs (426). The system also provides access to shipping related services such as freight brokerage, direct booking for liner transport, load and discharge supervision and laboratory testing.

French Abstract:

L'invention concerne un procede et un systeme pour creer un marche electronique permettant de negocier des marchandises, faisant appel a des outils auxiliaires. Ce procede et ce systeme permettent de creer un centre de commerce electronique pour des importateurs et exportateurs de marchandises sur le marche mondial, ainsi que pour les intermediaires et fabricants se situant entre ces derniers. Ce centre de commerce est disponible par l'intermediaire de son site web qui permet un echange 24 heures sur 24 et la creation de marches commerciaux pour des marchandises telles que le cafe, le sucre, le cacao et le coton. Ce systeme evolutif donne acces a des services de tierces parties regroupees, lies a des operations effectuees en amont ou en aval du marche. Ces services peuvent comprendre des elements tels que des cotes de contrat a terme donnees en direct et des informations donnees en temps reel, des courtages de contrats a terme, des liens et ressources relatifs a la banque et aux finances, et un ensemble d'applications individualisees, adaptees aux exigences de gestion de risques specifique de membres et aux exigences d'execution de contrats de bout en bout. Ce systeme donne egalement acces a des services lies a

l'expedition tels que le courtage de fret, la reservation directe de transporteurs reguliers, la supervision du chargement et du dechargement, et des tests en laboratoire.

Type	Pub. Date	Kind	Text
Publication	20020124	A2	Without international search report and to be republished upon receipt of that report.
Search Rpt	20020613		Late publication of international search report
Republication	20020613	A3	With international search report.
Search Rpt	20020613		Late publication of international search report
Correction	20030403		Corrected version of Pamphlet:
Republication	20030403	A3	With international search report.

Detailed Description:

...426 is a " snapshoC window where users may select a quick quote options for the **most** recent **value** of a particular futures or options or equity contract, or display a streaming chart of... ...Physical Sugar; . This information is generated from the 1 5 system's own trading engine (**real-time** posting and **matching** algorithms). The **system** also provides polls and questionnaires 422 which are developed, presented and analyzed by the system...

13/5K/22 (Item 22 from file: 349) <u>Links</u>
PCT FULLTEXT
00799833
ELECTRONIC MALLS AND AUCTIONS BASED ON ADAPTIVE TRADE SPECIFICATIONS
GALERIE MARCHANDE ET VENTE AUX ENCHERES ELECTRONIQUES BASEES SUR DES SPECIFICATIONS COMMERCIALES ADAPTATIVES

Patent Applicant/Patent Assignee:

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  US; US(Residence); US(Nationality)

- **KATZ Marcel**; 1710 Wilmart Street, Rockville, MD 20852
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  (Designated only for: US)

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(Designated only for: US)

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(Designated only for: US)

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259 Congressional Lane, #502, Rockville, MD 20852; US; US(Residence); US(Nationality); (Designated only for: US)

Legal Representative:

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Blank Rome Comisky & McCauley LLP, 900 17th Street, N.W., Suite 1000, Washington, DC 20006; US;

	Country	Number	Kind	Date
Patent	WO	200133401	A2	20010510
Application	WO	2000US30323		20001103
Priorities	US	99163245		19991103
	US	2000703712		20001102

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;
MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 15539

English Abstract:

French Abstract:

L'invention concerne un marche electronique base sur des specifications commerciales adaptatives (ATS). Le systeme permet a des utilisateurs d'effectuer des transactions electroniques optimisees sur le Web. L'invention concerne un procede et un systeme qui permettent a des commercants d'etablir des correspondances sur un marche electronique, en fonction des specifications d'articles fournies par ces commercants par l'intermediaire de specifications commerciales adaptatives. Une fois determine l'objectif d'un commercant, le systeme lui recommande la transaction optimale, laquelle indique les articles et les quantites specifies par d'autres commercants dans le cadre du marche electronique. L'invention concerne en outre des procedes d'echange fondes sur l'ATS, qui s'effectuent en general sur un marche electronique, et en particulier dans des galeries marchandes electroniques ou ventes aux encheres electroniques.

Type	Pub. Date	Kind	Text
Publication	20010510	A2	Without international search report and to be republished upon receipt of that report.
Examination	20010726		Request for preliminary examination prior to end of 19th month from priority date
Declaration	20020411		Late publication under Article 17.2a
Republication	20020411	A2	With declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority.
Declaration	20020411		Late publication under Article 17.2a
Correction	20020815		Corrected version of Pamphlet:
Republication	20020815	A2	With declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority.

Detailed Description:

...Auction State describes the instantiated ATS's as a result of applying the Match-Making **Optimization** mechanism. The **system updates** the **Auction** State when a new ATS is entered as an auction bid, when a bidder changes... ...new changes. After the new changes are committed, the system will trigger the Match-Making **Optimization** mechanism in order to update the Auction State.

If an ATS participates concurrently in more ...

METHOD AND SYSTEM FOR CONDUCTING AN INVERSE AUCTION
PROCEDE ET SYSTEME POUR CONDUIRE UNE VENTE AUX ENCHERES DEGRESSIVES

Patent Applicant/Patent Assignee:

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- **BEN SHOHAM Ariel**; 5 Motza Haktana Street, 90805 Mevasseret Zion
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  (Designated only for: US)

Patent Applicant/Inventor:

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Legal Representative:

- **REINHOLD COHN AND PARTNERS(agent)**
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	Country	Number	Kind	Date
Patent	WO	200129720	A2	20010426
Application	WO	2000IL651		20001013
Priorities	IL	132441		19991018

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;
MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;

UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 7376

English Abstract:

French Abstract:

Procede de vente aux encheres d'un produit ou d'un service en ligne dans lequel un terminal informatique d'un acheteur potentiel est utilise pour acceder a un site informatique comprenant un ordinateur serveur (31) de vente aux encheres. Le serveur (31) de vente aux encheres recoit une entree de base indiquant un produit ou un service qu'un acheteur potentiel (34) peut acheter ainsi qu'un vendeur selectionne (32) et les conditions d'achat, et il permet a des vendeurs en concurrence de repondre a une publication de l'entree de base et d'offrir des conditions d'achat meilleures que celles du vendeur selectionne. Lorsque l'acheteur accepte une offre du vendeur, un contrat est etabli de maniere provisoire entre le vendeur et l'acheteur, et, en meme temps, l'offre est transmise a d'autres vendeurs potentiels pouvant proposer une offre de base a meilleur marche. Si aucune proposition dans ce sens n'est faite pendant un intervalle de temps predetermine, l'offre provisoire devient definitive.

Type	Pub. Date	Kind	Text
Publication	20010426	A2	Without international search report and to be republished upon receipt of that report.
Examination	20010712		Request for preliminary examination prior to end of 19th month from priority date
Declaration	20020228		Late publication under Article 17.2a
Republication	20020228	A2	With declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority.

Detailed Description:

...computer implemented
auction system and method. The system has as an objective to provide a **flexible** and **dynamic auction system** allowing participants to respond to other bids thus enjoying the advantages of the so-called "ascending-bid" fortnat. Thus the intention here, too, is to **maximize revenue** for the auctioneer and is the very opposite of an inverse auction whose purpose is...

13/5K/29 (Item 29 from file: 349) <u>**Links**</u>

00557640
METHOD AND APPARATUS FOR AUCTIONS WITH AUTOMATIC MATCHING
PROCEDE ET APPAREIL DE VENTE AUX ENCHERES AVEC MISE EN CORRESPONDANCE
AUTOMATIQUE

Patent Applicant/Patent Assignee:

- **LUSTIG Andrew;**
  ; ;

- **ISAAC Jeffrey;**
  ; ;

	Country	Number	Kind	Date
Patent	WO	200021013	A1	20000413
Application	WO	99US23260		19991006
Priorities	US	98103276		19981006

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main
G06F-017/60	Main

Publication Language: English
Filing Language:
Fulltext word count: 25256

English Abstract:

The present invention comprises an electronic trading system referred to as ETS (100). ETS allows traders to conduct commercial transactions with each other. ETS allows its traders to trade on an expandable and unlimited number of interconnected exchanges. Each trader enters his own orders on an exchange. ETS also allows its traders to create an expandable and unlimited number of accounts by which each trader organizes and controls the orders he has entered. The major types of orders a trader can enter are : bid, ask, correlated, negatively correlated and arbitrage. For each order a trader submits to ETS, the trader can select among the following four types of negotiation strategies: displayed, hidden, now-or-never and periodic. This four-tiered approach allows traders to pursue simultaneous automated negotiations.

French Abstract:

La presente invention concerne un systeme de commerce electronique, ci-apres denomme ETS (100). Le systeme ETS permet aux negociateurs d'effectuer des transactions commerciales entre eux. Le systeme ETS permet a ces negociateurs de realiser des transactions sur un nombre illimite et croissant de bourses interconnectees. Chaque

negociateur passe ses propres ordres sur une place boursiere. Le systeme ETS permet egalement aux negociateurs de creer un nombre illimite et croissant de comptes grace auxquels le negociateur organise et controle les ordres qu'il a passes. Generalement, un negociateur passe des ordres du type: offre d'achat, ordre de vente, correlation, anticorrelation et arbitrage. Pour chaque ordre soumis par un negociateur au systeme ETS, le negociateur peut faire son choix parmi les quatre types de strategies de negociation suivants: offre publique, offre secrete, offre du type now or never et offre periodique. Cette approche en quatre volets permet aux negociateurs de conduire des negociations automatisees de maniere simultanee.

Claims:

...and second orders is executed.

19 The electronic trading system of claim 17, wherein the **system**-wide
automatic order **matching** engine:59SUBSTITUTE SHEET (RULE 26)identifies the first and second orders as test orders... ...second orders for execution dependingupon which of the first and second orders provides the **maximum** present**value** price improvement to the first trader.
20 The electronic trading system of claim 17, wherein...

13/5K/30 (Item 30 from file: 349) <u>Links</u>
PCT FULLTEXT
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00483343
ORDER PROCESSING APPARATUS AND METHOD
SYSTEME ET PROCEDE DE TRAITEMENT DE COMMANDES

Patent Applicant/Patent Assignee:

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  ; ;

- **SEIFERT Benedict;**
  ; ;

- **HESSELBO Robert;**
  ; ;

	Country	Number	Kind	Date
Patent	WO	9914695	A1	19990325
Application	WO	98GB2818		19980917
Priorities	GB	9719829		19970917

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main
G06F-017/60	Main

Publication Language: English
Filing Language:
Fulltext word count: 13207

English Abstract:

An apparatus for processing trading orders, comprising: a central server connectable to a plurality of terminals on which user orders are to be entered. The central server further comprises: communication means for transmitting user orders between said terminals and said central server via a network; first storage means for storing received user orders as an array whose elements define a particular first resource ordered by a particular user; the first storage means is also to be used for storing the resources that may be offered by users for exchange against the first resource ordered; second storage means for storing an array of coefficients each representing the proportion of a particular order that is to be satisfied; processing means for retrieving the orders from the first storage means, calculating an optimized set of values of the coefficients with respect to at least one predetermined, adjustable constraint and at least one predetermined, adjustable criterion, storing the optimized coefficient values in said second storage means; and output means for communicating the processed orders and their respective coefficients.

French Abstract:

Systeme de traitement de commandes constitue d'un serveur central pouvant etre connecte a une pluralite de terminaux pour entrer des commandes d'usagers. Le serveur central comprend un moyen de communication pour transmettre les commandes d'usagers desdits terminaux vers ledit serveur par l'intermediaire d'un reseau; un premier support de donnees pour mettre en memoire des commandes d'usagers recues en tant que tableau dont les elements definissent une premiere ressource particuliere commandee par un usager particulier, ce premier support de donnees etant egalement utilise pour mettre en memoire les ressources eventuellement offertes par des usagers en echange des premieres ressources commandees. Le serveur central comprend egalement un deuxieme support de donnees pour mettre en memoire un tableau de coefficients dont chacun represente la proportion d'une commande particuliere devant etre satisfaite; un moyen de traitement pour extraire des commandes du premier support de donnees, d'une part, pour calculer et optimiser des series de valeurs des coefficients relativement a au moins une contrainte predeterminee adaptable et par rapport a au moins un critere predetermine adaptable et, d'autre part, pour mettre en memoire les valeurs de coefficient optimisees dans ledit deuxieme support de donnees. Le serveur central comprend enfin un moyen de sortie pour communiquer les commandes traitees et leurs coefficients respectifs.

Detailed Description:

...of orders. This 1S is due to the fact that, from a mathematical standpoint, the **optimisation** problem is well defined and indeed invariant under the operations of splitting up a ...number of small orders into one big order. Furthermore, there are effective numerical methods of **optimisation** which can practically implement the solution to the **optimisation** problem. As the structure of the most natural **optimisation** problems arising (as those listed above) is linear, any of the many numerical 2 0 schemes for solving linear **optimisation** problems will do the job. The present invention has the advantage that it enables trades... ...to buy (respectively) q, r, p, at exchange rates all equal to 1, then the **system** would **automatically** produce a **matching** by assigning q to P, r to Q, and p to R.

Similar examples can...

19/5K/1 (Item 1 from file: 348) <u>Links</u>
EUROPEAN PATENTS
01685670
Method and apparatus for solving concisely expressed combinatorial auction problems
Verfahren und Vorrichtung zur Losung von klar fortmulierten Problemen einer kombinatorischen Auktion
Procede et dispositif a resoudre des problems claires d'une vente aux encheres combinatoire

Patent Assignee:

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  (Applicant designated States: all)

Inventor:

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Legal Representative:

- **Land, Addick Adrianus Gosling et al (59332)**
  Arnold & Siedsma, Advocaten en Octrooigemachtigden, Sweelinckplein 1; 2517 GK Den Haag; (NL)

	Country	Number	Kind	Date	
Patent	EP	1383068	A2	20040121	(Basic)
	EP	1383068	A3	20040128	
Application	EP	2003077189		20030711	
Priorities	US	395157	P	20020711	
	US	211771		20020802	
	US	618238		20030711	

Designated States:
DE; FR; GB; SE;

Extended Designated States:
AL; LT; LV; MK; SI;

International Patent Class (V7): G06F-017/60**Abstract** EP 1383068 A3

A method for enabling optimizing software to determine an optimal allocation in a combinatorial auction includes (a) receiving a plurality of bids each of which includes a plurality of sub bids, wherein each sub bid is comprised of one of (1) one good and an associated price and (2) a logical operator logically connecting at least two child sub bids and a price associated with the logical operator; (b) defining an objective for the plurality of bids; (c) defining for each bid a plurality of mathematical relationships without logical operators that collectively represent the bid; and (d) causing the optimizing software to process the received bids to achieve the objective subject to the mathematical relationships. The method can be embodied in instructions stored on a computer-readable medium. When executed by a processor, the instructions can cause the processor to perform the method.

Abstract Word Count: 143
NOTE: 2
NOTE: Figure number on first page: 2

Type	Pub. Date	Kind	Text
Application:	20040121	A2	Published application without search report
Search Report:	20040128	A3	Separate publication of the search report
Priority:	20040331	A2	Priority information changed: 20040212
Examination:	20040609	A2	Date of request for examination: 20040406
Change:	20060823	A2	Title of invention (German) changed: 20060823
Change:	20060823	A2	Title of invention (English) changed: 20060823
Change:	20060823	A2	Title of invention (French) changed: 20060823

Publication: English
Procedural: English
Application: English

Available Text	Language	Update	Word Count
CLAIMS A	(English)	200404	3520
SPEC A	(English)	200404	8906
Total Word Count (Document A) 12426			
Total Word Count (Document B) 0			
Total Word Count (All Documents) 12426			

Specification: ...current methods have difficulty with combinatorial auctions involving goods and bids beyond the hundreds.

Combinatorial **auctions** are a form of **auction** in which a seller with multiple items for sale accepts **bids** on bundles, or combinations of items. When items exhibit complimentarities for potential buyers, that is, when certain items are less valuable unless complementary items are obtained, allowing combinatorial **bids** generally reduces a bidder's risk and allows for a more efficient allocation of goods... ...had the items been auctioned individually, either sequentially or simultaneously. Given a set of combinatorial **bids** on a collection of items, the winner determination problem is that of allocating items to bidders, i.e., determining the winning **bids** /bundles, so as to **maximize** the seller's **revenue**. Applications of **combinatorial auctions** range from commodities **trading**, to resource allocation, to scheduling, to logistics planning, and the selling of any goods that...

PCT FULLTEXT
01075741
A METHOD AND A SYSTEM FOR IMPROVED TRADING OF COMBINATIONS AND BAITS GENERATED THEREOF
PROCEDE ET SYSTEME D'ECHANGE AMELIORES ET ORDRES DERIVES AINSI OBTENUS

Patent Applicant/Patent Assignee:

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  SE; SE(Residence); SE(Nationality)

Legal Representative:

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	Country	Number	Kind	Date
Patent	WO	2003105044	A2	20031218
Application	WO	2003SE922		20030605
Priorities	SE	20021756		20020610

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; HU; IE; IT; LU; MC; NL;
PT; RO; SE; SI; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 4037

English Abstract:

French Abstract:

Type	Pub. Date	Kind	Text
Publication	20031218	A2	With declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority.
Examination	20040129		Request for preliminary examination prior to end of 19th month from priority date

Claims:

...try to create baits/derived orders from the outright order in the legs in the **combination**, step 313. The **values** used by the **matching** unit 213 may vary depending on what instruments that are to be traded. For example... ...to-yield calculations are done by the calculation unit 211 for fast access by the **matching** unit 213 to calculate the prices of the outright legs. The **matching** unit also needs the duration of the legs for the calculation of the volumes of... ...All these calculations are very computer intensive and thus can not be performed by the **matching** unit 211 without rendering a bad performance for the autor@ated **exchange**. In the example of a covered option trade the **matching** unit 213 needs the delta values of the outright legs to calculate the volumes but... ...the order book and derived orders are calculated and placed in the order book, the **matching** procedure has to be run again whenever a price in the outright instruments are changed or a new order is entered in the outright **market**, step 315. The procedure will be similar to the one described above in steps 301... ...either case if a new order is entered far away from the last or the **market** price existing in the **market** the values requested by **matching** unit 213 from the memory 215 may not exist in the memory 215. This is... ...the global memory 215, step 407. The new values will be based on the current **market** prices. In this manner, the probability that the **matching** unit 213 again has to query the calculation unit 211 will be reduced. When the... ...409. In another preferred embodiment the requested value is first calculated and returned to the **matching** unit before the memory is updated. The calculation unit may preferably continuously receive **market** data so that it can precalculate the **most** likely **values** to be used by the **matching** unit 213. The calculated values may, for example, be all the values a standard deviation (volatility) away from the current **market** values. The **matching** unit 213 will use the values received from the global memory 215 or the calculation unit 211 to calculate the price and/or volume for the baits. Thus, the **matching** unit will be likely to do some calculations, but the process intensive calculations as iterative... ...price is determined according to some formula instead of being fixed ratios as most electronic **trading** systems are designed to handle today. The system and method can also guarantee that all parts of the combination will be executed since the execution is done in the **matching** process.
CLAIMS
1 A matching unit of an automated exchange, the matching unit receiving orders...

19/5K/6 (Item 6 from file: 349) <u>Links</u>
PCT FULLTEXT
00982622
PRICING SYSTEM AND METHOD
SYSTEME ET PROCEDE DE DETERMINATION DE PRIX

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Patent Applicant/Inventor:

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Legal Representative:

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	Country	Number	Kind	Date
Patent	WO	200312715	A1	20030213
Application	WO	2002NZ143		20020731
Priorities	NZ	513253		20010731

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; BG; CH; CY; CZ; DE; DK; EE; ES;
FI; FR; GB; GR; IE; IT; LU; MC; NL; PT;
SE; SK; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZM; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 5001

English Abstract:

The invention provides a method for pricing a product or a combination of products for sale by one or more vendors to a customer. The method comprises the steps of obtaining a time and/or date range from a customer, the time and/or date range representing the customer's desired time and/or date range for availability of the product or combination of products and obtaining one or more flexibility parameter values from a customer, the flexibility value(s) representing the flexibility of the customer in relation to the product or combination of products. The flexibility parameter(s) are stored in computer memory. Maximum values from the vendor for each of the parameter values are obtained and stored in computer memory. A price is calculated for the product based on one or more of the flexibility parameter values and the maximum values corresponding to those flexibility parameter values. The invention also provides a related pricing system of a product or a combination of products for sale by one or more vendors to a customer.

French Abstract:

L'invention concerne un procede de determination du prix d'un produit ou d'une combinaison de produits destine(s) a etre vendu(s) a un client par un ou plusieurs vendeur(s). Le procede comporte les etapes consistant a obtenir d'un client une plage de temps et/ou de periodes, cette plage de temps et/ou de periodes representant le souhait du client quant a la disponibilite du produit ou de la combinaison de produits ; et a obtenir du client une ou plusieurs valeurs de parametres de flexibilite, la/les valeur(s) de flexibilite representant la flexibilite du client par rapport au produit ou a la combinaison de produits. Ce(s) parametre(s) de flexibilite est/sont stocke(s) dans une memoire d'ordinateur. Des valeurs maximum sont obtenues du vendeur pour chaque valeur de parametre et sont stockees dans la memoire d'ordinateur. Un prix du produit est calcule sur la base d'une ou de plusieurs valeurs de parametres de flexibilite et de valeurs maximum correspondantes. L'invention concerne aussi un systeme associe de determination du prix d'un produit ou d'une combinaison de produits destine(s) a etre vendu(s) a un client par un ou plusieurs vendeur(s).

Type	Pub. Date	Kind	Text
Publication	20030213	A1	With international search report.
Examination	20030530		Request for preliminary examination prior to end of 19th month from priority date

Detailed Description:

...the flexibility values representing the flexibility of the customer in relation to the product or **combination** of products; **maximum values** from the vendor for each of the parameter values stored in computer memory; and a price **calculator** configured to calculate a price for the product based on one or more of the flexibility parameter **values** and a **maximum values** corresponding to those flexibility parameter values.

BRIEF DESCRIPTION OF THE FIGURES
The @pricing system and...

Claims:

...the flexibility values representing the flexibility of the customer in relation to the product or **combination** of products; **maximum values** from the vendor for each of the parameter values stored in
computer memory; anda price **calculator** configured to calculate a price for the product based on one or more of the flexibility parameter **values** and a **maximum values** corresponding to those flexibility parameter values.

7 A pricing system as claimed in claim 6...

19/5K/11 (Item 11 from file: 349) <u>Links</u>
PCT FULLTEXT

00892303
AUCTION MANAGEMENT
GESTION DE VENTES AUX ENCHERES

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	Country	Number	Kind	Date
Patent	WO	200225544	A2	20020328
Application	WO	2001US29113		20010917
Priorities	US	2000664226		20000918

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GQ; GW;
ML; MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

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G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 13726

English Abstract:

French Abstract:

Type	Pub. Date	Kind	Text
Publication	20020328	A2	With declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority.
Examination	20030206		Request for preliminary examination prior to end of 19th month from priority date

Detailed Description:

...or service, a category or sub-category that contains that good or service, or any **combination** of **goods**, services, categories, and sub-categories. As shown in FIG. 7, the RFQ can thus be ... ...enables a supplier to freely organize groups of goods and services into units on which **bids** are accepted. For example, in FIG. 7, a first supplier can propose a price for... ...chairs. A second supplier might propose a price for the entire office furniture requisition. The

optimization I 0 engine parses the **bids** from the first and second supplier to enable comparison of the **bids** on a cost-per-item basis.

Within the RFQ, the buyer can provide additional buyer...

19/5K/17 (Item 17 from file: 349) <u>Links</u>
PCT FULLTEXT
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00816815
METHODS AND APPARATUS FOR RAPID DEPLOYMENT OF A VALUATION SYSTEM
PROCEDES ET DISPOSITIF POUR LE DEPLOIEMENT RAPIDE D'UN SYSTEME D'EVALUATION

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Legal Representative:

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	Country	Number	Kind	Date
Patent	WO	200150348	A2	20010712
Application	WO	2000US34916		20001221
Priorities	US	99173695		19991230
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Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;
MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 14611

English Abstract:

French Abstract:

Selon l'invention, un systeme integre (300) organise les experiences, les modes de fonctionnement, les pratiques exemplaires, les sources d'information, les informations liees a la concurrence et les instruments d'analyse d'une societe. L'objectif est d'augmenter la rentabilite dans le cadre d'un processus de concertation tout en facilitant les operations en cours. Le systeme selon l'invention integre un procede de collaboration sur des questions de concertation pour influencer la constitution de connaissances au sein d'equipes de concertation. Le procede selon l'invention comprend l'acces a des connaissances accumulees et stockees dans des archives, provenant d'exercices de concertation anterieurs, l'application de criteres de decisions de concertation sur la base de modules analytiques consolides d'exercices de concertation anterieurs, ainsi que le stockage de connaissances nouvellement acquises a partir des exercices de concertation en cours dans les archives de connaissances accumulees.

Type	Pub. Date	Kind	Text
Publication	20010712	A2	Without international search report and to be republished upon receipt of that report.
Examination	20011018		Request for preliminary examination prior to end of 19th month from priority date
Declaration	20020725		Late publication under Article 17.2a
Republication	20020725	A2	With declaration under Article 17(2)(a); without abstract; title not checked by the International Searching Authority.

Claims:

profitability score is generated.
If threshold conditions 160 are met, bid 154 is subjected to a simulatedbid opening analysis 161 to predict whether the bid can be expected to be a winning bid. An outcome of a sealed bid auction depends on sizes of the bids received from each bidder. Execution of the auction involves opening all of the bids and selling the items up for auction to the highest bidder. In traditional sealed bid auctions, bidders are not allowed to change their bids once their bid is submitted and bidders do not know the bids placed by other bidders until the bids are opened, making the outcome of the auction uncertain. By placing higher bids, a probability that the auction will be 1 5 won is higher, but value gain is lower if it was possible to have won the auction at a lower price.Simulating competitive bidding increases the probability of capturingthe highest upside of profitability by setting a range of bid/sale prices that have a propensity to exhaust any competing bidder's purses before ones... ...a hidden agenda, personality or unilateral knowledge.Each potential bidder has a range of possible bids that might besubmitted to a sealed bid auction. The range of bids can be expressed as a statistical distribution. By stochastically sampling from a distribution of bid values, one possible auction scenario may be simulated. Further by using an iterative sampling technique, for example a Monte... ...produce a distribution of outcomes. The distribution of outcomes include a probability of winning the auction item(s) and the value gain. By varying the value of ones own bid, a probability of

winning the **auction** against ones own **bid** price can be determined.The following core elements are used to simulate a competitive **bidding**yield, codification of **market** rules and contracts into computerized business rules, codification of potential competition/**market** forces, forecasted budgets and priorities into a preference matrix, one's own **bidding** capacity, preferences, risk/return tradeoffs agreed to codified into a preference matrix, and a . computerized stochastic optimization.Analysis 160'simulates a competitive environment with othercompaniés having various financial capabilities **bidding** against the **bids** calculated by system 28. In one embodiment, analysis 160, for example and without limitation, includes a total **bid** limit such as would be the case where the total value of the assets exceed... ...one embodiment, analysis 160 might assess the profitability, in such case of limited resources to **bid**, of 5 **bidding** on various combinations of tranches. Analysis 160 also takes into account past history in **bidding** against known competitors and information on the various types of assets preferred by competing bidders. In analysis 160, the tranche **bid** is then evaluated and set by management 162 and a final tranche **bid** 164 made. All valuations prior to the making of the **bid** 164 can be repeated as desired. Further, since the process is self-adjusting and iterative, the tranche **bid** price 164 tends to climb upward with each iteration as more and more value is... ...described by flowchart 85 includes an evaluation stage 166(shown in Figure 3) and a **bid** preparation stage 168 (shown in Figure 4). Evaluation stage 166 includes procedures 14, 34 and...are tabulated or grouped in one or more combinations. To have maximum flexibility for various **bidding** scenarios, any subset of portfolio 12 is valued and priced separately in a particular time... ...groupings by asset company to groupings by geographical location of borrowers, 1 5 revaluation of **bids** may be inadequate because gross extrapolation 20 will need to be performed. In using system... ...preferto value a financial asset more by what similar assets trade in the open **market** for versus an individual's opinion. In rank order, the **market-to-market** value is selected over an individual's opinion.In the same way assets in ...in hand for the asset, (b) partial cash in hand for the asset, (c) liquid **market** value for like asset, (d)direct underwrite, and (e) inferred underwrite.The food chain approach... ...any point in the discovery process.As shown in Figure 4, the general framework of **bid** preparation stage168 is to price **bid** 164 similar to option valuation paradigms where the winning investor will have the right, but...after taking control of the assets. One embodiment is a well traded security purchased below **market** value as part of a portfolio. Probable cash flow variance is a function of the... ...thus areas 198 relate to each other in magnitude and hence in significance to overall **bids** 70, 72 and 74. The inore that is known about the asset, the more curve...more than a five-percent certainty that the project will have a negative NPV, no **bid** is made. Deal evaluation is by tranche with decision criteria being ERR, risk variance of... ...and NPV of the expected cash flow by tranche discounted to risk free rate.In **competitive bid** circumstances when the content of asset portfolios isnot negotiable, the investor or seller has... based upon the attributes. This opinion is used in a sample underwriting process 216 and **values** are checked for **combinations** of attributes and reconciled 218. Process 210 then selects and sets 220 the individual attributes... ...are sampled 242 according to risk. Second, assets are underwritten 244, and valuations recorded. Third, **market** value clusters are formed 246, such as by FCM, as described below. Fourth, regression models previous appraisal amount, **market** value cluster (predicted from previous appraisal amount, land area, building area, current appraisal amount, court **auction** realized price, property type and property location. Typically, assets are sampled in an adverse manner... ...typically summarized in terms of monetary units (e.g., 100,000KRW), at then current **market** prices.'Figure 9 is a high level overview 290 of the automated portion of the... ...flow bridge 148, stochastic cash flow bridge 152 and cash flow table 150. The resultant **bid** valuation 154 is subjected to gaming strategies 160 and management adjustments 162 to produce the final **bid** 164.Figure 10 is a flow diagram of an exemplary embodiment of formingclusters 246... ...based model, which results in agrouping of U'W assets by Collateral Usage and **Market** V
alue ("CUMV") groups,
using Previous Appraisal Amount ("PAA") as the driving variable.Two approaches...

PCT FULLTEXT

00809396

AUTOMATED EXCHANGE FOR THE EFFICIENT ASSIGNMENT OF AUDIENCE ITEMS
ECHANGE AUTOMATISE POUR L'ATTRIBUTION EFFICACE DES PRODUITS D'AUDIENCE

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	Country	Number	Kind	Date
Patent	WO	200143027	A1	20010614
Application	WO	2000US33179		20001208
Priorities	US	99169973		19991210
	US	2000197672		20000417
	US	2000202813		20000508

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

[EP] AT; BE; CH; CY; DE; DK; ES; FI; FR; GB;
GR; IE; IT; LU; MC; NL; PT; SE; TR;

[OA] BF; BJ; CF; CG; CI; CM; GA; GN; GW; ML;
MR; NE; SN; TD; TG;

[AP] GH; GM; KE; LS; MW; MZ; SD; SL; SZ; TZ;
UG; ZW;

[EA] AM; AZ; BY; KG; KZ; MD; RU; TJ; TM;

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main

Publication Language: English
Filing Language: English
Fulltext word count: 23346

English Abstract:

An automated exchange system is provided which includes a smart electronic double auction for allocating audience items among perspective buyers and sellers for calculating a set of prices for these items, i.e. any form of advertising time and/or space in any media environment, based on buyer bids and seller offers. The system and method include processing bids and offers, identifying a set of trades in audience items between buyers and sellers which optimize gains obtained by buyers and sellers from the set of trades in the audience items and calculating a price for each item (12). The system processes participants' complex preferences for multiple, heterogeneous, items while providing efficiency advantages, such as reduced transaction costs.

French Abstract:

La presente invention concerne un systeme d'echange automatise comportant une double adjudication electronique intelligente pour l'allocation de produits d'audience entre des acheteurs et des vendeurs potentiels et pour le calcul d'un ensemble de prix pour ces produits, c'est a dire toute forme de temps et/ou d'espace publicitaire dans tout environnement de medias, sur la base des demandes des acheteurs et des offres des vendeurs. Le systeme et procede comporte le traitement des demandes et des offres, l'identification d'un ensemble d'echanges commerciaux en produits d'audience entre acheteurs et vendeurs et le calcul d'un prix pour chaque produit (12). Le systeme effectue un traitement efficace des preferences complexes des participants pour une pluralite de produits heterogenes et multidimensionnels tout en procurant des avantages d'efficacite, tels des couts de transaction reduits.

Type	Pub. Date	Kind	Text
Publication	20010614	A1	With international search report.
Publication	20010614	A1	Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Examination	20011018		Request for preliminary examination prior to end of 19th month from priority date

Detailed Description:

...market mechanisms that can create an efficient assignment of heterogeneous items to the buyers that **value** them the **most**. However, in many instances, the valuations prospective buyers have for a collection of items may...
...buyer may desire to purchase a printer only if he also purchases a computer. The **value** of a **combination** of items is said to be super-additive if the **value** of the **combination** exceeds the sum of the individual values. Similarly, the cost to provide a combination of... ...the sum of the costs to provide the individual items. The use of a "simple" **auction** to assign multiple items in such circumstances may generate several undesirable outcomes, including an inefficient...

19/5K/25 (Item 25 from file: 349) <u>Links</u>
PCT FULLTEXT
00563461
CROSSING NETWORK AND METHOD

RESEAU CROISE ET PROCEDE Y RELATIF

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  ; ;

- **LUPIEN William A;**
  ; ;

	Country	Number	Kind	Date
Patent	WO	200026834	A2	20000511
Application	WO	99US25369		19991029
Priorities	US	98106268		19981030

Designated States: (All protection types applied unless otherwise stated - for applications 2004+)

Main International Patent Classes (Version 7):

IPC	Level
G06F-017/60	Main

Publication Language: English
Filing Language:
Fulltext word count: 25235

English Abstract:

A crossing network that matches buy and sell orders based upon a satisfaction and quantity profile is disclosed. The crossing network includes a number of trader terminals that can be used for entering orders. The orders are entered in the form of a satisfaction density profile that represents a degree of satisfaction to trade a particular instrument at various (price, quantity) combinations. Typically, each order is either a buy order or a sell order. The trader terminals are coupled to a matching controller computer. The matching controller computer can receive as input the satisfaction density profiles entered at each one of the trading terminals. The matching controller computer matches orders (as represented by each trader's satisfaction density profile) so that each trader is assured that the overall outcome of the process (in terms of average price and size of fill) has maximized the mutual satisfaction of all traders. Typically, the matching process is anonymous and confidential. The matching process can be continuous or performed on a batch basis.

French Abstract:

L'invention concerne un reseau croise adaptant des ordres d'achat et de vente bases sur des profils en matiere de satisfaction et de quantites. Le reseau croise comprend une pluralite de terminaux de transaction pouvant etre utilises pour l'introduction d'ordres. Les ordres sont introduits sous forme d'un profil de densite de satisfaction representant un degre de satisfaction pour negocier un produit particulier a des combinaisons variees (prix et

quantites). Les terminaux de transaction sont couples a un ordinateur controleur d'adaptation. Ce dernier peut recevoir en entree, les profils de densite de satisfaction introduits dans chacun des terminaux de transaction. L'ordinateur controleur d'adaptation adapte des ordres (representes par profil de densite de satisfaction de chaque detaillant), de sorte que chaque detaillant est assure que le resultat global du processus (en terme de prix moyens et importance de reponse aux besoins) a maximalise la satisfaction mutuelle de tous les detaillants. Specifiquement, le processus d'adaptation est anonyme et confidentiel. Le processus d'adaptation peut etre realise en continu ou traite par lots.

Claims:

...method according to claim I 1 4, wherein the predetermined set of constraints include:(1) **trading** through the price of a coordinate with standing,(2) **trading** at the price of a coordinate with standing, where the latter has classor time... ...sell coordinates. and rescanning the list from the top toSUBSTTTUTE SHEET (RULE 26)continue **trading** thereby revisiting negotiation coordinates that previously may have been skipped over because they were blocked... ...when no non-zero mutual preference coordinates remain on the list. 120. A method for **matching** buy orders with sell orders for instruments comprising the steps ofa) receiving a plurality of... determined at which the aggregation attractor can attract adequate volume from the contra list without **trading** through any contra kernels with standing, or **trading** at a price of higher class priority contra kernels with standing.123. The method according... ...kernel has standing. 124. The method according to claim 123, further comprising the steps ofn) **trading**, in subsequent trades of a given cycle, through an aggregation attractor kernel with standing, if... ...would trade through a price of any coordinate with standing on its side of the **market** or if a resulting price would trade through any coordinate that is willing to do... ...to claim 124. further comprising the steps of. r) preventing any attractor@s price from **trading** at the price of any kernel possessing standing from another profile on the aggregation attractor's side of the **market**, unless the latter is a CQS profile. if the aggregation attractor has standing but does... ...to a two-sided aggregation stage if aggregation is blocked from bothsides of the **market**:u) repeating the aggregation stage until no further aggregations are possible. 126. The method accordin... ...shares spanned by the row of unity coordinates.SUBSTMJTE SHE7r. (RULE 26). A method for **matching** orders, comprising the steps ofa) receiving a plurality of orders, wherein each order has a... ...of orders anonymous;c) maintaining the characteristics of the plurality of orders confidential; and d) **matching** at least some of the orders based on a mutual satisfaction function. 129. The method... ...of an order is selected from a group consisting of a trader, a specialist, a **market** maker, a firm. and combinations thereof 130. The method of Claim 128, wherein the orders... ...price of the security, a quantity of shares of the security, a preference value for **trading** the security at a certain price and quantity, conditions relating to the way in which...cross products in ascending order. 137. The method of Claim 136, wherein step (e) comprises **matching** the buy and sell profiles based on the ranked cross products. 138. A method for **trading** instruments matched by a **matching** engine in an external host computer, said method comprising the steps of. a) receiving a **trading** message at an **exchange** from the external host computer indicating a trade to be executed in a particular instrument... ...executed represents a result of a match of the buyer and the seller by the **matching** engine from among a plurality of **trading** orders entered in the form of a satisfaction density profile, which represents a degree of... ...executing the trade in the particular instrument between the buyer and the seller in the **exchange**, said trade resulting from an **optimization** of the mutual satisfaction of all buyers and sellers by the **matching** engine from among the plurality of **trading** ordersentered by the plurality of traders; andC) sending a confin-nation message from the **exchange** to the external host computer indicating that the trade in the particular instrument between the buyer and the seller was executed.SUBSTMITE SHEET (RULE 26). A method for **trading** instruments matched by a **matching** engine in an external host computer, said method comprising the steps ofa) receiving a **trading** message at an **exchange** indicating a trade to be executed in a particular instrument between at least one buyer... ...least one seller of the particular instrument, which trade to be executed results from an **optimization** of the mutual satisfaction of all buyers and sellers based on satisfaction density profiles by the

matching engine; b) executinor the trade in the particular instrument between the buyer and theseller in the exchange; andC) sending a confirmation message indicating that the trade in the particular instrument between... ...was executed. 140. A method for exchanging instruments comprising the steps ofa) receiving an electronic trading message indicating a trade to be executed in a particular instrument between at least one... ...least one seller of the particular instrument, which trade to be executed results from an optimization of the mutual satisfaction of all buyers and sellers based on satisfaction density profiles by the matching engine; b) executing the trade in the particular instrument between the buyer and theseller in an exchange; andC) sending an electronic confirmation message indicating that the trade in the particular instrument... ...executed.141 A method for exchanging instruments comprising the steps of:a) receiving an electronic trading message indicating a trade to be executed in a particular instrument between at least one... ...least one seller of the particular instrument, which trade to be executed results from an optimization of the mutual satisfaction of all buyers and sellers based on satisfaction density profiles by the matching engine; andSUBST= SHEFI" (RULE 26)b) executing the trade in the particular instrument between the buyer and the seller in an exchange. 142. The method according to claim 141, further comprising the step of transmitting electronically a... ...method according to claim 141, further comprising the step of transmitting a message to a market data reporting service indicating a result of the trade. 145. A computer-implemented trading system in which a crossing network matches orders for instruments where each order is represented by a satisfaction density profile, thecomputer-implemented trading system comprising:a) means for receiving a trading message indicating a trade to be executed between a buyer and a seller, which trade to be executed results from a match by the crossingnetwork, said receiving means being couplable to the crossing network;b) means for executing the trade in the instrument received in the trading messagebetween the buyer and seller identified in the trading message; andC) means for transmitting a confirmation message confirming that the trade identified in the trading message was executed.SUBSTrWE SHEET (RULE 26). An exchange for trading a plurality of instruments, in which an external computer matches orders for the plurality of instruments, and in which each order is represented by a satisfaction density profile, the exchange comprising a computer beingprogrammed to:a) receive a plurality of trading messages from the external computer, each of the plurality of trading messages indicating a trade to be executed between a buyer and a seller;andb) execute each of the plurality of trades represented by the plurality of trading messages in the instruments identified in the plurality of trading messages and between the buyers and sellers identified in the plurality of trading messages. 147. The exchange according to claim 146, wherein said computer is further programmed to transmit a confirmation message confirming that each of the plurality of trades represented by the plurality of trading messages was executed. 148. The exchange according to claim 146, wherein the instrument includes stocks. 149. The exchange according to claim 146, wherein the instrument includes futures. 150. The

exchange according to claim 146, wherein the instrument includes currencies. 151. The exchange according to claim 146, wherein the instrument includes bonds. 152. The exchange according to claim 146, wherein the instrument includes options.SUBSTMITE SHEET (RULE 26). The exchange according to claim 146, wherein the instrument includescommodities. 154. The exchange according to claim 146. wherein the instrument includes derivatives. 155. The exchange according to claim 146, wherein the instrument includes insurance contracts. 156. The exchange according to claim 146, wherein the instrument includes airline tickets. 157. The exchange according to claim 146, wherein the instrument includes contracts for goods. 158. The exchange according to claim 146. wherein the instrument includes computer chips. 159. The exchange according to claim 146, wherein the instrument includes concert tickets. 160. The exchange according to claim 146, wherein the trading messages are received at regular time intervals.SUBSTMJTE SHEF (RUI E: 26). A crossing network adapted to match orders, comprising:a matching controller computer programmed to: (i) receive orders that include a satisfaction density profile representing a... ...a degree of mutual satisfaction: and (iv) rank the mutual satisfaction functions. 162. A crossing network according to claim 16 1, further comprising at least one trader terminal to which said matching controller computer is coupled.163. A crossing network according to claim 162, further comprising acommunications

network through which said at least one trader terminal is coupled to said **matching** controller computer. 164. A crossing **network** according to claim 162, wherein at least a portion of said orders are transmitted to said **matching** controller computer from said at least one trader terminal. 165. A crossing **network** according to claim 161, wherein said **matching** controller computer is further programmed to match, in accordance with said ranking, buy and sell orders. 166. A crossing **network** according to claim I 00, wherein said **matching** controller computer is further programmed to select from among equally ranked mutual satisfaction functions.SUBSTMITE SHEET (RULE 26). A method for **matching** buy orders with sell orders comprising the steps ofa) receiving a plurality of buy and... ...plurality of sell preference profiles, each kernel including a plurality of contiguous coordinates having a **maximum** preference **value** ata particular price over a volume range;C) selecting a kernel from a set... ...aggregating multiple contra side kernels to fill the volume of saidselected kernel at a **trading** price; ande) incrementally improving the **trading** price of said selected kernel. 168. A method according to Claim 167, further comprising selecting a kernel with the most aggressive **trading** price. 169. A method according to Claim 168, further comprising incrementally improving the **trading** price for said selected kernel until a decrease in available volume to trade is detected. 170. A method for **trading** instruments comprising the steps of. a) receiving a plurality of contra side orders for **trading** an instrument;b) initializing portions of each order;C) selecting an initialized portion of one order to attempt a trade thereforat a **trading** price within a volume range;SUBSTMJTE SHEET (RULE 26)d) aggregating multiple contra side initialized portions to fill the volumeof said selected initialized portion at the **trading** price; ande) attempting to improve the **trading** price of said selected initializedportion.171. A method for **matching** orders, comprising:(a) creating plurality of buy and sell kernels based on buy and sell...

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Set      Items   Description
S1       10459    S AUTOMATIC???? OR SELECTIVELY OR DYNAMIC??? OR REAL()TIME OR REALTIME OR
ADAPTABL? OR ALTERABL? OR ALTERNAT? OR CHANGEABL? OR CONVERTIBL? OR ADJUSTABL? OR FLEXIB?
OR IMMEDIATE? OR INSTANT? OR INTERACTIV? OR ITERAT? OR MODIFIABL? OR ON(1W)FLY OR
SIMULTANEOUS? OR SYNCHRONOUS? OR UP(1W)DATE OR UP(2W)MINUTE OR UPDATE?
S2       22279    S AUCTION? ? OR MULTIAUCTION OR MULTI()AUCTION OR EXCHANGE OR INTERCHANGE
OR MARKET OR NETWORK OR SITE OR TRADING OR MATCHING OR BID OR BIDS OR BIDDING OR OFFER OR
OFFERS OR EQUILIBRIUM OR CALCULATOR OR (COMPETITIVE OR COUNTER)()(OFFER? OR BID???) OR
COUNTEROFFER?
S3       30200    S PLAN? ? OR MODEL? ? OR STRATEG??? OR DESIGN? ? OR METHOD? ? OR
BLUEPRINT? ? OR LAYOUT? ? OR SYSTEM? ? OR SCHEME? ? OR PROCEDURE? ?
S4         917    S OPTIMI?ATION OR COMBINED()VALUE OR (OPTIM??? OR OPTIMI?ATION OR
SUB()OBTIM BEST OR GREATEST OR BIGGEST OR MOST OR LARGEST OR MAXIM??? OR TOP OR FAVORABLE
OR FAVOURABLE OR HIGHEST OR POSITIVE)(3N)(RETURN? ? OR WORTH OR VALUE? ? OR GAIN? ? OR
EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR MARGIN? ?)
S5          13    S (COMBINATION? ? OR COMBINATORIAL OR COMBINATIONAL)(3N)(RETURN? ? OR
WORTH OR VALUE? ? OR GAIN? ? OR EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR
PROCEEDS OR MARGIN? ? OR GOOD? ?)
S6         307    S S1 (2W) S2
S7          45    S S6 (3N) S3
S8          45    S S7 AND S5
S9          45    S S8 NOT PY>1999
S10        604    S (INTERNET OR INTRANET OR EXTRANET OR WIDE()AREA()NETWORK OR WAN OR
LOCAL()AREA()NETWORK OR LAN OR NETWORK? ? OR CENTRAL()SERVER OR ONLINE OR ON()LINE OR
VIRTUAL OR HUB OR HUBS)(2N)(AUCTION? ? OR MULTIAUCTION OR MULTI()AUCTION OR EXCHANGE OR
INTERCHANGE OR MARKET OR TRADING OR BID OR BIDS OR BIDDING)
S11          4    S S10 AND S9
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11/5/1 **Links**
TecInfoSource
01220631   **Document Type:** Product

Product Name: NYFIX Millenium Alternative Trading System (ATS) (220631)

NYFIX Inc (567434)
333 Ludlow St
Stamford , CT   06902 United States
Telephone: (203) 425-8000

File Segment: Directory

Descriptors: E-Commerce; Front Ends; **Online** Stock **Trading**; Portfolio Management; Securities; Stock Brokers; Stock Market

11/5/2 **Links**
TecInfoSource
00147769   **Document Type:** Review

Product Names: Microsoft Office Live Communications Server 2003 (183997)

Title: Microsoft IM Grows Legs: Office IM and presence offering take on...
Author: Evers, Joris
Source: InfoWorld ,   v25 n33   p14(2) Aug 25, 2003
ISSN: 0199-6649
Homepage: http://www.infoworld.com

File Segment: Review
Record Type: Product Analysis
Grade: Product Analysis, No Rating

Microsoft Office Live Communications Server 2003 is designed to compete with IBM in the enterprise instant messaging (IM) market, and could garner market share among new users. Key benefits for Microsoft including more leadership in the enterprise desktop market and a growing market share among Exchange 2000 IM users who, if they purchased upgrade rights, will get Office Live Communications Server 2003 free. Office Live Communications Server 2003 will allow companies to run their own enterprise IM network, deal with security issues related to public services, and log and manage the IM use of employees. Office Live Communications Server 2003 can find out if a user is online and available for communication in Office applications. This level of presence data also can be extended to other applications, such as portals. IBM Lotus Sametime, which was recently redubbed Lotus Instant Messaging and Conferencing, has been the leader in the industry for about five years. However, because Office is on just about all business PCs, Microsoft has an edge, because the new product integrates with Office and SharePoint. Microsoft aims to provide IM in a Microsoft-centered context, and chose Office, in part because the Exchange IM product was not ready. The advantages of IBM Sametime, says an expert, include lower overall cost, inclusion of

Web conferencing, no requirement for another server, and module-based configuration.
Company Name: Microsoft Corp (112127)
Special Feature: Charts
Descriptors: Exchange; Instant Messaging; Network Administration; Network Software; **System** Monitoring;
WANs; Windows NT/2000
Revision Date: 20031030

11/5/3 **Links**
TecInfoSource
00146205   **Document Type:** Review

Product Names: FIX (835366)

Title: FIX Opens Up the Inner Circle:...Financial Information Exchange...
Author: Schmerken, Ivy
Source: Wall Street & Technology , p20(4) Mar 2003
ISSN: 1060-989X
Homepage: http://www.wallstreetandtech.com

File Segment: Review
Record Type: Product Analysis
Grade: Product Analysis, No Rating

The Financial Information Exchange (FIX) protocol has become a strategic part of firms' trading systems. FIX is an open standard that provides for real-time electronic communication between buy- side and sell-side traders. It was started 10 years ago by a group of elite firms. Until recently, vendors have been excluded from the FIX Global Technical Committee, but now, technology firms are being recruited to join. In 2003, FIX Protocol Limited, the organization that operates the FIX protocol, opened up membership to include exchanges, **alternative trading systems**, utilities, and vendors. The protocol is expanding to fixed income, and there is also interest from futures and options exchanges. Other new initiatives include retaining a management-consulting firm to advise it on its reorganization, and hiring an executive director to promote the protocol and manage activities for the organization. FPL will start charging membership fees to support the new initiatives. The organization faces several challenges, foremost of which is certification. The Global Steering Committee is considering a certification program for fixed income processing, following a stalled initiative three years ago. It is expanding the protocol to fixed income and global derivatives, and moving into allocation messages. There are many opportunities to expand FIX, and the next step will likely be around allocation processing.
Company Name: TecTerms (999999)
Descriptors: Communications Protocols; Communications Standards; Financial Institutions; **Online** Stock
Trading; Stock Market
Revision Date: 20030730

11/5/4 **Links**
TecInfoSource

00144093   **Document Type:** Review

Product Names: Bond Market (839311)

Title: STP in the Bond Market? Not yet, but electronic initiatives are...
Author: Sales, Robert
Source: Wall Street & Technology ,   v20 n12   p20(3) Dec 2002
ISSN: 1060-989X
Homepage: http://www.wallstreetandtech.com

File Segment: Review
Record Type: Product Analysis
Grade: Product Analysis, No Rating

The Bond Marketing Association (BMA) plans to construct a standard- messaging hub and will debut an comprehensive version of FIX in its effort to provide straight-through processing to the fixed income community. BMA, guided by its STP steering committee, plans a standard hub through which trade messages can be sent to each **alternative trading system** and **virtual** marketing utility (VMU). Peter J. Murray, chair of the steering committee and managing director of the America operations for Credit Suisse First Boston, says the hub should mean considerable cost savings for bond dealers. VMUs are all building different technologies and functions, which requires dealers to communicate with all the platforms. ATSes are also building identical functions, which will require a new interface for each ATS. In addition, several firms in Europe are considering construction of a VMU. However, the BMA's messaging hub would permit dealers to communicate to one location, and that messaging hub would send trade messages to the correct VMU or ATS. The BMA has yet to choose a vendor to run the development project. The planned availability date is in 3Q2003 or 4Q2003. Funding has not been announced, but could come only from bond dealers or from other segments of the fixed income community.
Company Name: TecTerms (999999)
Descriptors: B2B Marketplaces; Bond **Market**; Communications Standards; **Online** Stock **Trading**
Revision Date: 20030430

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; d s
Set      Items     Description
S1       18646     S ELECTRONIC COMMERCE/DE
S2        2415     S GOODS DISTRIBUTION/DE
S3        8858     S COMBINATORIAL MATHEMATICS/DE
S4      169639     S INTERNET/DE
S5       13786     S SOFTWARE AGENTS/DE
S6       71973     S PROBABILITY/DE
S7          49     S S1 AND S6
S8           2     S S7 NOT PY>1999
S9         877     S S1 AND S5
S10          6     S S9 AND S6
S11         37     S S1 AND S3
S12         36     S S11 AND S6
S13          8     S S12 NOT PY>2000
S14          6     S S4 AND S5 AND S6
S15          6     RD (unique items)
```

8/5/1 (Item 1 from file: 2) <u>Links</u>
08027910 **INSPEC Abstract Number:** C2001-10-6170-023
Title: Algorithms for optimizing levelled commitment contracts
Author Sandholm, T.; Sikka, S.; Norden, S.
Author Affiliation: Dept. of Comput. Sci., Washington Univ., St. Louis, MO, USA
Conference Title: IJCAI-99. Proceedings of the Sixteenth International Joint Conference on Artificial Intelligence
Part vol.1 p. 535-40 vol.1
Editor(s): Dean, T.
Publisher: Morgan Kaufmann Publishers , San Francisco, CA, USA
Publication Date: 1999 **Country of Publication:** USA 2 vol. xxii+1452 pp.
ISBN: 1 55860 613 0 **Material Identity Number:** XX-1999-00967
Conference Title: Proceedings of Sixteenth International Joint Conference on Artificial Intelligence. IJCAI 99
Conference Sponsor: Int. Joint Conferences on Artificial Intelligence; Scandinavian AI Soc
Conference Date: 31 July-6 Aug. 1999 **Conference Location:** Stockholm, Sweden

Language: English **Document Type:** Conference Paper (PA)
Treatment: Theoretical (T)
Abstract: In automated negotiation systems consisting of self-interested agents, contracts have traditionally been binding. Levelled commitment contracts, i.e. contracts where each party can decommit by paying a predetermined penalty, were recently shown to improve Pareto efficiency even if agents rationally decommit in Nash equilibrium using inflated thresholds on how good their outside offers must be before they de-commit. This paper deals with the four levelled commitment contracting protocols by presenting algorithms for using them. Algorithms are presented for computing the Nash equilibrium de-committing thresholds and de-committing probabilities given the contract price and penalties. Existence and uniqueness of the equilibrium are analyzed. Algorithms are also presented for optimizing the contract itself. Existence and uniqueness of the optimum are analyzed. Using the algorithms we offer a contract optimization service on the web as part of eMediator, our next generation electronic commerce server. Finally, the algorithms are generalized to contracts involving more than two agents. (14 Refs)
Subfile: C
Descriptors: electronic commerce; game theory; multi-agent systems; optimisation; **probability**; protocols
Identifiers: levelled commitment contracts; Pareto efficiency; Nash equilibrium; protocols; probability; optimization; electronic commerce; multiple agent systems
Class Codes: C6170 (Expert systems and other AI software and techniques); C5640 (Protocols); C7120 (Financial computing); C7180 (Retailing and distribution computing); C1140E (Game theory); C1180 (Optimisation techniques)

8/5/2 (Item 2 from file: 2) <u>Links</u>
Fulltext available through: <u>USPTO Full Text Retrieval Options</u>
07481961 **INSPEC Abstract Number:** C2000-03-7170-003
Title: Automatic customization rule generation for electronic sales promotion in wholesale industry
Author Yumoto, M.; Komoda, N.; Mori, T.
Author Affiliation: Osaka Univ., Japan

Language: Japanese   **Document Type:** Journal Paper (JP)
Treatment: Applications (A); Practical (P)
Abstract: In a sales promotion task, suppliers prepare and present the sales promotion proposal plans for negotiating with retailers' buyers what commodities they should sell. For the electronic sales promotion tasks, a B-to-B EC system using mass customization technology has been developed. In this system, a standard sales promotion proposal plan is modified with customization rules for each retailer. The customization rules vary by the retailer's conditions. Furthermore, the effective lifetime of the customization rules is very short because of the appearance of new commodities and seasonal changes. Therefore, the rules should be generated automatically. The paper proposes a customization rule generation method from sales log data for mass customization technology. Customization rules determine the related commodities from a target retailers' conditions and an arbitrary commodities on the standard plan. In proposal method, these rules are generated based on correlative probability, existence probability, and reverse correlative probability according to the related commodities from order transactions. The related commodities for target customization rules become the addition commodities for personal sales promotion proposal plan. The proposed method has been applied to real log data in the wholesale industry. It is confirmed that the proposal plans from customization rules are efficient for sales promotion tasks. (5 Refs)
 Subfile: C
Descriptors: electronic commerce; knowledge acquisition; **probability**; sales management
Identifiers: automatic customization rule generation; electronic sales promotion; wholesale industry; mass customization technology; commodities; retailers; correlative probability; existence probability; order transactions
Class Codes: C7170 (Marketing computing); C6170K (Knowledge engineering techniques); C7120 (Financial computing)

10/5/1 (Item 1 from file: 2) <u>Links</u>
INSPEC
09922906

Mechanisms and Systems. AAMAS 2004 Workshop, AMEC 2004. Revised Selected Papers
Conference Date: 19 July 2004   Conference Location: New York, NY, USA

Abstract: Negotiations are an important way of reaching agreements between selfish autonomous agents. In this paper we focus on one-to-many bargaining within the context of agent-mediated electronic commerce. We consider an approach where a seller negotiates over multiple interdependent attributes with many buyers individually. Bargaining is conducted in a bilateral fashion, using an alternating-offers protocol. In such a one-to-many setting, "fairness," which corresponds to the notion of envy-freeness in auctions, may be an important business constraint. For the case of virtually unlimited supply (such as information goods), we present a number of one-to-many bargaining strategies for the seller, which take into account the fairness constraint, and consider multiple attributes simultaneously. We compare the performance of the bargaining strategies using an evolutionary simulation, especially for the case of impatient buyers and small premature bargaining break off probability. Several of the developed strategies are able to extract almost all the surplus; they utilize the fact that the setting is one-to-many, even though bargaining occurs in a bilateral fashion. (12 Refs)
 Subfile: C
Descriptors: electronic commerce; evolutionary computation; multi-agent systems; probability; software agents
Identifiers: multiattribute bilateral bargaining; one-to-many setting; seller negotiation; selfish autonomous agents; agent-mediated electronic commerce; alternating-offer protocol; evolutionary simulation; probability
Class Codes: C7100 (Business and administration); C6170 (Expert systems and other AI software and techniques); C1140Z (Other topics in statistics); C1230 (Artificial intelligence)

 10/5/2 (Item 2 from file: 2) **Links**
INSPEC
09874201
Title: Bidding for customer orders in TAG SCM
Author Pardoe, D.; Stone, P.
Author Affiliation: Texas Univ., Austin, TX, USA
Conference Title: Agent-Mediated Electronic Commerce VI. Theories for and Engineering of Distributed Mechanisms and Systems. AAMAS 2004 Workshop, AMEC 2004. Revised Selected Papers (Lecture Notes in Artificial Intelligence Vol. 3435)   p. 143-57
Conference Title: Agent-Mediated Electronic Commerce VI. Theories for and Engineering of Distributed Mechanisms and Systems. AAMAS 2004 Workshop, AMEC 2004. Revised Selected Papers
Conference Date: 19 July 2004   **Conference Location:** New York, NY, USA

Abstract: Supply chains are a current, challenging problem for agent-based electronic commerce. Motivated by the trading agent competition supply chain management (TAG SCM) scenario, we consider an individual supply chain

agent as having three major subtasks: acquiring supplies, selling products, and managing its local manufacturing process. In this paper, we focus on the sales subtask. In particular, we consider the problem of finding the set of bids to customers in simultaneous reverse auctions that maximizes the agent's expected profit. The key technical challenges we address are i) predicting the probability that a customer would accept a particular bid price, and ii) searching for the most profitable set of bids. We first compare several machine learning approaches to estimating the probability of bid acceptance. We then present a heuristic approach to searching for the optimal set of bids. Finally, we perform experiments in which we apply our learning method and bidding method during actual gameplay to measure the impact on agent performance. (12 Refs)

Subfile: C D

Descriptors: electronic commerce; learning (artificial intelligence); **probability**; sales management; **software agents**; supply chain management

Identifiers: customer orders; agent-based electronic commerce; trading agent competition supply chain management; TAG SCM scenario; sales subtask; simultaneous reverse auctions; probability; machine learning; heuristic approach; bidding method

Class Codes: C7170 (Marketing computing); C7180 (Retailing and distribution computing) ; C6170K (Knowledge engineering techniques); C1140Z (Other topics in statistics); D2010 (Business and professional IT applications); D2140 (Marketing, retailing and distribution applications of IT)

10/5/3 (Item 3 from file: 2) **Links**
 Fulltext available through: USPTO Full Text Retrieval Options
INSPEC
09276880 **INSPEC Abstract Number:** C2005-03-7170-016
Title: An arbitration agent for bilateral trading in an electronic marketplace
Author Balaji, K.; Malhotra, V.S.
Author Affiliation: High Performance Comput. of Engineered Syst., Singapore-MIT Alliance, Singapore, Singapore
Journal: WSEAS Transactions on Computers   vol.3, no.1   p. 103-10
Publisher: WSEAS ,
Publication Date: Jan. 2004 **Country of Publication:** Greece
ISSN: 1109-2750
SICI: 1109-2750(200401)3:1L.103:AABT;1-6
 Material Identity Number: I389-2004-007

Language: English   **Document Type:** Journal Paper (JP)
Treatment: Practical (P); Theoretical (T)
Abstract: In the context of business to business (B2B) commerce, bilateral trading on products or services would involve multiple attributes. The negotiating agents in the marketplace have conflicting interests and always act selfishly to maximize their own gains. An arbiter agent, by knowing the interest of these agents could resolve the conflicts between them. That is, the arbiter agent could ensure fairness among these agents by recommending bids that would make none worse off than the other. This objective of the arbiter agent is modelled as a max-min utility optimization problem (MMUOP) and we prove that this problem is NP-hard. We also prove that the running time complexity of any deterministic algorithm for MMUOP is as worse as that of the exhaustive algorithm. So, we propose a probabilistic algorithm based on simulated annealing to solve this optimization problem. By simulation experiments, we validate that the proposed algorithm behaves well in practice. (19 Refs)

Subfile: C D
Descriptors: computational complexity; **electronic commerce**; marketing data processing; minimax techniques; **probability**; simulated annealing; **software agents**
Identifiers: arbitration agent; bilateral trading; electronic marketplace; business to business commerce; negotiating agents; max-min utility optimization problem ; NP-hard problem; time complexity; deterministic algorithm; probabilistic algorithm; simulated annealing; bid recommendation
Class Codes: C7170 (Marketing computing); C6170 (Expert systems and other AI software and techniques); C4240C (Computational complexity); C1180 (Optimisation techniques); C1140Z (Other topics in statistics); D2140 (Marketing, retailing and distribution applications of IT)

10/5/4 (Item 4 from file: 2) <u>Links</u>
Title: Probabilistic pricebots
Author Greenwald, A.R.; Kephart, J.O.
Author Affiliation: Dept. of Comput. Sci., Brown Univ., Providence, RI, USA
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents   p. 560-7
Editor(s): Muller, J.P.; Andre, E.; Sen, S,; Frasson, C.
Publisher: ACM , New York, NY, USA
Publication Date: 2001   **Country of Publication:** USA   xiii+666 pp.
ISBN: 1 58113 326 X   **Material Identity Number:** XX-2002-03003
U.S. Copyright Clearance Center Code: 1-58113-326-X/01/0005...$5.00
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents
Conference Sponsor: ACM
Conference Date: 28 May-1 June 2001   **Conference Location:** Montreal, Que., Canada

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Practical (P); Theoretical (T)
Abstract: Past research has been concerned with the potential of embedding deterministic pricing algorithms into pricebots: software agents used by on-line sellers to automatically price Internet goods. In this work, probabilistic pricing algorithms based on no-regret learning are explored, in both high-information and low-information settings. It is shown via simulations that the long-run empirical frequencies of prices in a market of no-regret pricebots can converge to equilibria arbitrarily close to an asymmetric Nash equilibrium; however, instantaneous price distributions need not converge. (14 Refs)
Subfile: C
Descriptors: costing; **electronic commerce**; game theory; Internet; learning (artificial intelligence); **probability**; **software agents**
Identifiers: probabilistic pricebots; deterministic pricing algorithms; software agents; online sellers; Internet goods pricing; Shopbots; electronic commerce; game-theory; probabilistic pricing algorithms; no-regret learning; simulations; asymmetric Nash equilibrium
Class Codes: C7120 (Financial computing); C7210N (Information networks); C6150N (Distributed systems software); C7180 (Retailing and distribution computing); C1230L (Learning in AI); C1140E (Game theory)

10/5/5 (Item 5 from file: 2) <u>Links</u>
INSPEC

08535382   INSPEC Abstract Number: C2003-03-7120-066
Title: An auction agent for bidding on combinations of items
Author Matsumoto, Y.; Fujita, S.
Author Affiliation: Computational Intelligence & Syst. Sci., Tokyo Inst. of Technol., Yokohama, Japan
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents   p. 552-9
Editor(s): Muller, J.P.; Andre, E.; Sen, S,; Frasson, C.
Publisher: ACM , New York, NY, USA
Publication Date: 2001 **Country of Publication:** USA   xiii+666 pp.
ISBN: 1 58113 326 X   **Material Identity Number:** XX-2002-03003
U.S. Copyright Clearance Center Code: 1-58113-326-X/01/0005...$5.00
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents
Conference Sponsor: ACM
Conference Date: 28 May-1 June 2001   **Conference Location:** Montreal, Que., Canada

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Theoretical (T); Experimental (X)

Abstract: This paper describes a way to obtain sub-optimal profits in bidding for combinations of goods that are on auction at different sites, and results for an autonomous agent that bids for goods according to the proposed strategy. The types of requirements for combinations are classified as complementary, substitutive and independent. For each type, this paper specifies the region in which bidding on goods will make a positive profit. A bidding strategy is then proposed for sequential auctions under the condition that the bids by the other participants in the auction can be represented by a probabilistic function. Two simulations were constructed to evaluate the proposed strategy. They indicated that the agent that applies the proposed strategy was superior to others that bid for combinations of goods according to simple and intuitive strategies. The simulations also indicated that the proposed strategy was the equilibrium strategy of those we tested, when two agents were simultaneously bidding for the same combination of goods. (9 Refs)
Subfile: C
Descriptors: electronic commerce; Internet; **probability; software agents**
Identifiers: auction agent; bidding; item combinations; sub-optimal profits; autonomous agent; sequential auctions; probabilistic function; simulations; equilibrium strategy; electronic commerce; Internet
Class Codes: C7120 (Financial computing); C7180 (Retailing and distribution computing) ; C6170 (Expert systems and other AI software and techniques); C7210N (Information networks); C6150N (Distributed systems software)
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10/5/6 (Item 6 from file: 2) <u>Links</u>
INSPEC

08523240   INSPEC Abstract Number: C2003-03-7102-008
Title: Efficient search techniques for multi-attribute bilateral negotiation strategies
Author Tesauro, G.
Author Affiliation: IBM Thomas J. Watson Res. Center, Hawthorne, NY, USA

Conference Title: Proceedings Third International Symposium on Electronic Commerce   p. 30-6
Publisher: IEEE Comput. Soc , Los Alamitos, CA, USA
Publication Date: 2002 Country of Publication: USA   viii+103 pp.
ISBN: 0 7695 1861 3   Material Identity Number: XX-2002-03399
U.S. Copyright Clearance Center Code: 0-7695-1861-3/02/$17.00
Conference Title: Proceedings Third International Symposium on Electronic Commerce
Conference Sponsor: IBM; North Carolina State Univ
Conference Date: 18-19 Oct. 2002   Conference Location: Research Triangle Park, NC, USA
Medium: Also available on CD-ROM in PDF format

Language: English   Document Type: Conference Paper (PA)
Treatment: Theoretical (T)

Abstract: This paper proposes a principled and practical algorithm for computing optimal strategies in multi-attribute bilateral negotiations, based on Bayesian inference and combinatorial search. The algorithm estimates expected value of the negotiation, using conditional probabilities of opponent responses that are updated based on observed offers and responses. Optimal offer sequences are then computed that maximize expected value. Generally this requires combinatorial search of depth equal to the expected number of rounds, with branching ratio given by the number of possible offers times the number of possible responses. In some cases the branching ratio can be greatly reduced using local search. Also, for certain types of conditional probabilities, the combinatorial search can be eliminated, so that computation of optimal offers is only linear in search depth. The algorithm is tested for seller agents in an asymmetric protocol, in which the seller makes sequential offers, and the buyer either accepts or rejects each offer Using local search and fast incremental computation of conditional probabilities, sellers can compute optimal policies of depth 8 in real time, and up to depth 12 in reasonable off-line CPU time. This approach may be useful both for real-time on-line planning, and for extensive off-line planning for the initial stages of a negotiation, analogous to the use of an opening book in chess. (13 Refs)
Subfile: C
Descriptors: Bayes methods; combinatorial mathematics; **electronic commerce**; inference mechanisms; negotiation support systems; **probability**; real-time systems; search problems; **software agents**
Identifiers: multi-attribute bilateral negotiation strategies; efficient search techniques; algorithm; optimal strategies; Bayesian inference; combinatorial search; expected value estimation; conditional probabilities; opponent responses; responses; optimal offer sequences; expected value maximization; branching ratio; local search; search depth; seller agents; asymmetric protocol; sequential offers; buyer; fast incremental computation ; off-line CPU time; real-time on-line planning; off-line planning
Class Codes: C7102 (Decision support systems); C7120 (Financial computing); C7180 (Retailing and distribution computing); C1140Z (Other topics in statistics); C6170K (Knowledge engineering techniques); C1160 (Combinatorial mathematics)

13/5/1 (Item 1 from file: 2) <u>Links</u>
INSPEC
08073949   **INSPEC Abstract Number: C2001-12-1290D-053**
Title: Combinatorial auctions for supply chain formation
Author Walsh, W.E.; Wellman, M.P.; Ygge, F.
Author Affiliation: Artificial Intelligence Lab., Michigan Univ., Ann Arbor, MI, USA
Conference Title: EC'00. Proceedings of the 2nd ACM Conference on Electronic Commerce   p. 260-9

Language: English   Document Type: Conference Paper (PA)
Treatment: Economic aspects (E); Theoretical (T); Experimental (X)
Abstract: Supply chain formation presents difficult coordination issues for distributed negotiation protocols. Agents must simultaneously negotiate production relationships at multiple levels, with important interdependencies among inputs and outputs at each level. Combinatorial auctions address this problem by global optimization over expressed offers to engage in compound exchanges. A one-shot combinatorial auction that optimizes the reported value of the bids results in optimal allocations with truthful bids. But autonomous self-interested agents have an incentive to bid strategically in an attempt to gain extra surplus. We investigate a particular combinatorial protocol consisting of a one-shot auction and a strategic bidding policy. We experimentally analyze the efficiency and producer surplus obtained in five networks, and compare this performance to that of a distributed, progressive auction protocol with non-strategic bidding. We find that producers can sometimes gain significantly by bidding strategically. However, when the available surplus is small relative to the consumers' values, the producers' strategic behavior may prevent the supply chain from forming at all, resulting in zero gains for all agents. We examine the robustness of the combinatorial protocol by investigating agent incentives to deviate, identifying quasi-equilibrium behavior for an example network. (19 Refs)
 Subfile: C
Descriptors: **combinatorial mathematics**; distributed processing; **electronic commerce**; protocols; software agents
Identifiers: combinatorial auctions; supply chain formation; coordination; distributed negotiation protocols; production relationships; global optimization; compound exchanges; combinatorial protocol; one-shot auction; strategic bidding policy; surplus; agent incentives; quasi-equilibrium behavior
Class Codes: C1290D (Systems theory applications in economics and business); C1160 (Combinatorial mathematics); C7120 (Financial computing); C5640 (Protocols)
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13/5/2 (Item 2 from file: 2) <u>Links</u>
INSPEC
08073947 INSPEC Abstract Number: C2001-12-1290D-051
Title: Computationally feasible VCG mechanisms
Author Nisan, N.; Ronen, A.
Author Affiliation: Sch. of Comput. Sci. & Eng., Hebrew Univ., Jerusalem, Israel
Conference Title: EC'00. Proceedings of the 2nd ACM Conference on Electronic Commerce   p. 242-52

Conference Sponsor: ACM
Conference Date: 17-20 Oct. 2000   Conference Location: Minneapolis, MN, USA

Abstract: One of the major achievements of mechanism design theory is the family of truthful
(incentive-compatible) mechanisms often called VCG (named after Vickrey, Clarke and Groves). When applying
VCG mechanisms to complex mechanism design problems such as combinatorial auctions a problem emerges: even
finding optimal outcomes is computationally intractable. A striking observation is that if the optimal outcome is
replaced by the results of computationally tractable approximation algorithms or heuristics then the resulting
mechanism (termed VCG-based) is no longer necessarily truthful. The first part of this paper considers this problem
in depth and shows that it is almost universal. Specifically, we prove that essentially all reasonable approximations
or heuristics for combinatorial auctions as well as for a wide class of cost minimization problems yield non-truthful
VCG-based mechanisms. The second part of this paper proposes a method for handling this non truthfulness. We
introduce a notion of feasible truthfulness that captures the limitation on agents imposed by their own computational
limits. We then show that under reasonable assumptions on the agents, it is possible to turn any VCG-based
mechanism into a feasibly truthful one, using an additional appeal mechanism. The resulting mechanism also
satisfies participation constraints. (28 Refs)
 Subfile: C
Descriptors: approximation theory; **combinatorial mathematics; electronic commerce**; minimisation
Identifiers: mechanism design theory; incentive-compatible mechanisms; truthful mechanisms; VCG mechanisms;
combinatorial auctions; approximation algorithms; cost minimization; appeal mechanism; participation constraints
Class Codes: C1290D (Systems theory applications in economics and business); C1180 (Optimisation techniques);
C1160 (Combinatorial mathematics)

 13/5/3 (Item 3 from file: 2) **Links**
INSPEC
08073929 **INSPEC Abstract Number: C2001-12-7120-020**
Title: Towards a universal test suite for combinatorial auction algorithms
Author Leyton-Brown, K.; Pearson, M.; Shoham, Y.
Author Affiliation: Dept. of Comput. Sci., Stanford Univ., CA, USA
Conference Title: EC'00. Proceedings of the 2nd ACM Conference on Electronic Commerce   p. 66-76
Publisher: ACM , New York, NY, USA
Publication Date: 2000 **Country of Publication:** USA   vii+271 pp.
ISBN: 1 58113 272 7   **Material Identity Number:** XX-2000-02428
U.S. Copyright Clearance Center Code: 1 58113 272 7/2000/0010..$5.00
Conference Title: Proceedings of ACM Conference on Electronic Commerce (EC-00)
Conference Sponsor: ACM
Conference Date: 17-20 Oct. 2000   Conference Location: Minneapolis, MN, USA

Abstract: General combinatorial auctions - auctions in which bidders place unrestricted bids for bundles of goods -
are the subject of increasing study. Much of this work has focused on algorithms for finding an optimal or

approximately optimal set of winning bids. Comparatively little attention has been paid to methodical evaluation and comparison of these algorithms. In particular, there has not been a systematic discussion of appropriate data sets that can serve as universally accepted and well-motivated benchmarks. We present a suite of distribution families for generating realistic, economically motivated combinatorial bids in five broad real-world domains. We hope that this work will yield many comments, criticisms and extensions, bringing the community closer to a universal combinatorial auction test suite. (26 Refs)
Subfile: C
Descriptors: combinatorial mathematics; electronic commerce; optimisation
Identifiers: universal test suite; combinatorial auction algorithms; optimal winning bids; distribution families
Class Codes: C7120 (Financial computing); C1160 (Combinatorial mathematics); C1180 (Optimisation techniques); C1290D (Systems theory applications in economics and business)
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13/5/4 (Item 4 from file: 2) <u>Links</u>
INSPEC

08073925   INSPEC Abstract Number: C2001-12-1290D-041
Title: An efficient approximate algorithm for winner determination in combinatorial auctions
Author Sakurai, Y.; Yokoo, M.; Kamei, K.

Author Affiliation: NTT Commun. Sci. Lab., Kyoto, Japan

Conference Title: EC'00. Proceedings of the 2nd ACM Conference on Electronic Commerce   p. 30-7
Publisher: ACM , New York, NY, USA
Publication Date: 2000 **Country of Publication:** USA   vii+271 pp.
ISBN: 1 58113 272 7   **Material Identity Number:** XX-2000-02428
U.S. Copyright Clearance Center Code: 1 58113 272 7/2000/0010..$5.00
Conference Title: Proceedings of ACM Conference on Electronic Commerce (EC-00)
Conference Sponsor: ACM
Conference Date: 17-20 Oct. 2000   **Conference Location:** Minneapolis, MN, USA

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Economic aspects (E); Theoretical (T); Experimental (X)

Abstract: This paper presents an approximate algorithm for the winner determination problem in combinatorial auctions. This algorithm is based on limited discrepancy search (LDS). Internet auctions have become an integral part of electronic commerce and can incorporate large-scale, complicated types of auctions including combinatorial auctions, where multiple items are sold simultaneously and bidders can express complementarity among these items. Although we can increase participants' utilities by using combinatorial auctions, determining the optimal winners is a complicated constraint optimization problem that is shown to be NP-complete. We introduce the idea of LDS to an existing algorithm based on the IDA/sup */ algorithm, which is guaranteed to find an optimal solution. The merit of LDS is that it can avoid time-consuming re-computation of the heuristic function h(.), since LDS is less sensitive to the quality of h(.). It can also limit the search efforts to promising regions. Experiments using various problem settings show that LDS can find near-optimal solutions (better than 95%) very quickly (around 1% of the running time) compared with the existing optimal algorithm. (15 Refs)

Subfile: C
Descriptors: combinatorial mathematics; constraint theory; **electronic commerce;** optimisation; tree searching
Identifiers: approximate algorithm; winner determination; combinatorial auctions; limited discrepancy search; Internet auctions; electronic commerce; multiple items; constraint optimization; NP-complete problem

Class Codes: C1290D (Systems theory applications in economics and business); C7120 (Financial computing);
C1160 (Combinatorial mathematics)
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13/5/5 (Item 5 from file: 2) <u>Links</u>
08073924 **INSPEC Abstract Number: C2001-12-1290D-040**
Title: AkBA: a progressive, anonymous-price combinatorial auction
Author Wurman, P.R.; Wellman, M.P.
Author Affiliation: North Carolina State Univ., Raleigh, NC, USA.
Conference Title: EC'00. Proceedings of the 2nd ACM Conference on Electronic Commerce   p. 21-9
Publisher: ACM , New York, NY, USA
Publication Date: 2000 **Country of Publication:** USA   vii+271 pp.
ISBN: 1 58113 272 7   **Material Identity Number:** XX-2000-02428
U.S. Copyright Clearance Center Code: 1 58113 272 7/2000/0010..$5.00
Conference Title: Proceedings of ACM Conference on Electronic Commerce (EC-00)
Conference Sponsor: ACM
Conference Date: 17-20 Oct. 2000   **Conference Location:** Minneapolis, MN, USA

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Economic aspects (E); Theoretical (T)
Abstract: The allocation of discrete, complementary resources is a fundamental problem in economics and of direct
interest to E-commerce applications. Combinatorial auctions account for complementarities by optimizing over
offers expressed in terms of bundles. Progressive versions of combinatorial auctions alleviate the burden on bidders
of expressing offers for all bundles of interest by providing interim feedback based on partial sets of bids. Feedback
in terms of hypothetical prices is particularly useful, as it directs bidders toward those bundles potentially yielding
the greatest surplus. For a general class of discrete resource allocation problems with free disposal, we establish by
construction the existence of competitive equilibrium prices on bundles that support the efficient allocation. We
introduce AkBA, a family of progressive auctions that use these equilibrium bundle prices. We examine a particular
instance of the family, called A1BA, and present some empirical data on its performance. (26 Refs)
Subfile: C
Descriptors: combinatorial mathematics; costing; economics; **electronic commerce**; optimisation
Identifiers: AkBA; progressive combinatorial auction; anonymous-price combinatorial auction; economics;
E-commerce; offer optimization; bundles; interim feedback; partial bid sets; discrete resource allocation; free
disposal; competitive equilibrium prices; performance
Class Codes: C1290D (Systems theory applications in economics and business); C1160 (Combinatorial
mathematics); C1180 (Optimisation techniques)
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13/5/6 (Item 6 from file: 2) <u>Links</u>
08073923 **INSPEC Abstract Number: C2001-12-1290D-039**
Title: Optimal solutions for multi-unit combinatorial auctions: branch and bound heuristics

Author Gonen, R.; Lehmann, D.

Author Affiliation: Sch. of Comput. & Eng., Hebrew Univ., Jerusalem, Israel
Conference Title: EC'00. Proceedings of the 2nd ACM Conference on Electronic Commerce   p. 13-20

Conference Title: Proceedings of ACM Conference on Electronic Commerce (EC-00)

Conference Sponsor: ACM

Conference Date: 17-20 Oct. 2000   **Conference Location:** Minneapolis, MN, USA

Language: English   **Document Type:** Conference Paper (PA)

Treatment: Economic aspects (E); Theoretical (T); Experimental (X)

Abstract: Finding optimal solutions for multi-unit combinatorial auctions is a hard problem and finding approximations to the optimal solution is also hard. We investigate the use of branch-and-bound techniques: they require both a way to bound from above the value of the best allocation and a good criterion to decide which bids are to be tried first. Different methods for efficiently bounding from above the value of the best allocation are considered. Theoretical original results characterize the best approximation ratio and the ordering criterion that provides it. We suggest the use of this criterion. (14 Refs)
 Subfile: C

Descriptors: combinatorial mathematics; electronic commerce; finance; optimisation; tree searching

Identifiers: optimal solutions; multi-unit combinatorial auctions; hard problem; best allocation; bounding; approximation ratio; ordering criterion; branch and bound heuristics

Class Codes: C1290D (Systems theory applications in economics and business); C1180 (Optimisation techniques); C1160 (Combinatorial mathematics)

13/5/7 (Item 7 from file: 2) **Links**

08073922 **INSPEC Abstract Number:** C2001-12-1290D-038

Title: Bidding and allocation in combinatorial auctions

Author Nisan, N.

Author Affiliation: Inst. of Comput. Sci., Hebrew Univ., Jerusalem, Israel
Conference Title: EC'00. Proceedings of the 2nd ACM Conference on Electronic Commerce   p. 1-12

Conference Title: Proceedings of ACM Conference on Electronic Commerce (EC-00)

Conference Sponsor: ACM

Conference Date: 17-20 Oct. 2000   **Conference Location:** Minneapolis, MN, USA

Language: English   **Document Type:** Conference Paper (PA)

Treatment: Economic aspects (E); Practical (P); Theoretical (T)

Abstract: When an auction of multiple items is performed, it is often desirable to allow bids on combinations of

items, as opposed to only on single items. Such an auction is often called "combinatorial". And the exponential number of possible combinations results in computational intractability of many aspects regarding such an auction. This paper considers two of these aspects: the bidding language and the allocation algorithm. First we consider which kinds of bids on combinations are allowed and how, ie, in what language, they are specified. The basic tradeoff is the expressibility of the language versus its simplicity. We consider and formalize several bidding languages and compare their strengths. We prove exponential separations between the expressive power of different languages, and show that one language, "OR-bids with phantom items", can polynomially simulate the others. We then consider the problem of determining the best allocation - a problem known to be computationally intractable. We suggest an approach based on linear programming (LP) and motivate it. We prove that the LP approach finds an optimal allocation if and only if prices can be attached to single items in the auction. We pinpoint several classes of auctions where this is the case, and suggest greedy and branch-and-bound heuristics based on LP for other cases. (29 Refs)
 Subfile: C
Descriptors: combinatorial mathematics; costing; **electronic commerce**; formal languages; linear programming; tree searching
Identifiers: combinatorial auctions; computational intractability; bidding language; allocation algorithm; language expressibility; language simplicity; formal language; exponential separations; OR-bids with phantom items; linear programming; LP; optimal allocation; prices; greedy heuristics; branch-and-bound heuristics
Class Codes: C1290D (Systems theory applications in economics and business); C7120 (Financial computing); C1160 (Combinatorial mathematics); C1180 (Optimisation techniques)
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 13/5/8 (Item 8 from file: 2) **Links**
INSPEC
07905382   **INSPEC Abstract Number:** C2001-05-7120-090
Title: Robust combinatorial auction protocol against false-name bids
Author Yokoo, M.; Sakurai, Y.; Matsubara, S.
Author Affiliation: NTT Commun. Sci. Labs., Kyoto, Japan
Conference Title: Proceedings Seventeenth National Conference on Artificial Intelligence (AAAI-2000). Twelfth Innovative Applications of Artificial Intelligence Conference (IAAI-2000)   p. 110-15
Publisher: AAAI Press , Menlo Park, CA, USA
Publication Date: 2000 **Country of Publication:** USA   xxix+1190 pp.
ISBN: 0 262 51112 6   **Material Identity Number:** XX-2000-02069
Conference Title: Proceedings of the Seventeenth National Conference on Artificial Intelligence
Conference Sponsor: American Assoc. Artificial Intelligence
Conference Date: 30 July-3 Aug. 2000   **Conference Location:** Austin, TX, USA

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Practical (P); Theoretical (T)
Abstract: Presents a combinatorial auction protocol (LDS protocol) that is robust against false-name bids. Internet auctions have become an integral part of electronic commerce (EC) and a promising field for applying agent and artificial intelligence technologies. Although the Internet provides an excellent infrastructure for combinatorial auctions, we must consider the possibility of a new type of cheating, i.e. an agent tries to profit from submitting several bids under fictitious names (false-name bids). If there exists no false-name bid, the generalized Vickrey auction (GVA) satisfies individual rationality, Pareto efficiency, and incentive compatibility. On the other hand,

when false-name bids are possible, it is theoretically impossible for a combinatorial auction protocol to simultaneously satisfy these three properties. The leveled division set (LDS) protocol, which is a modification of the GVA, utilizes reservation prices of auctioned goods for making decisions on whether to sell goods in a bundle or separately. The LDS protocol satisfies individual rationality and incentive compatibility, although it is not guaranteed to achieve a Pareto efficient social surplus. Simulation results show that the LDS protocol can achieve a better social surplus than that for a protocol that always sells goods in a bundle. (11 Refs)
 Subfile: C
Descriptors: combinatorial mathematics; electronic commerce; Internet; protocols; security of data; **software agents**
Identifiers: robust combinatorial auction protocol; false-name bids; Internet auctions; cheating; generalized Vickrey auction; individual rationality; Pareto efficiency; incentive compatibility; leveled division set protocol; reservation prices; Pareto efficient social surplus
Class Codes: C7120 (Financial computing); C6130E (Data interchange); C6150N (Distributed systems software); C6170 (Expert systems and other AI software and techniques); C1160 (Combinatorial mathematics); C6130S (Data security) ; C5640 (Protocols)
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 15/5/1 (Item 1 from file: 2) <u>Links</u>
INSPEC

09348900   **INSPEC Abstract Number:** B2005-05-6210L-265, C2005-05-5620W-219
Title: The Antnet routing algorithm-a modified version
Author Tekiner, F.; Ghassemlooy, F.Z.; Al-khayatt, S.
Author Affiliation: Opt. Commun. Res. Group, Northumbria Univ., Newcastle upon Tyne, UK
Conference Title: Communication Systems, Networks and Digital Signal Processing. CSNDSP 2004. Fourth International Symposium   p. 416-20
Editor(s): Dlay, S.S.
Publisher: Newcastle upon Tyne Univ , Newcastle upon Tyne, UK
Publication Date: 2004 **Country of Publication:** UK   620 pp.
ISBN: 0 7017 0177 3   **Material Identity Number:** XX-2005-00078
Conference Title: Communication Systems, Networks and Digital Signal Processing. CSNDSP 2004. Fourth International Symposium
Conference Date: 20-22 July 2004   **Conference Location:** Newcastle upon Tyne, UK

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Practical (P); Theoretical (T); Experimental (X)
Abstract: Antnet is an agent based routing algorithm that is influenced from the unsophisticated and individual ant's emergent behaviour. Ants (software agents) are used in Antnet to collect information and to update the probabilistic distance vector routing table entries. Modified Antnet algorithm has been introduced, which improve the throughput and average delay. Results shows that by detecting and dropping 0.5% of packets routed through the nonoptimal routes the average delay per packet decreased and network throughput can be increased. The effect of the traffic fluctuations has been limited with the boundaries introduced in this paper and the number of ants in the network has been limited with the current throughput of the network at any given time. (15 Refs)
 Subfile: B C
Descriptors: Internet; probability; software agents; telecommunication network routing; telecommunication

network topology; telecommunication traffic
Identifiers: Antnet; agent based routing algorithm; software agents; probabilistic distance vector routing table; network throughput; traffic fluctuation; Internet
Class Codes: B6210L (Computer communications); B6150P (Communication network design, planning and routing); B0240Z (Other topics in statistics); C5620W (Other computer networks); C6170K (Knowledge engineering techniques); C1140Z (Other topics in statistics)

15/5/2 (Item 2 from file: 2) **Links**
INSPEC
08613551   **INSPEC Abstract Number:** C2003-06-7250R-025
Title: Focused crawling using fictitious play
Author Kononen, V.
Author Affiliation: Neural Networks Res. Centre, Helsinki Univ. of Technol., Finland
Conference Title: Intelligent Data Engineering and Automated Learning - IDEAL 2002. Third International Conference (Lecture Notes in Computer Science Vol.2412)   p. 186-92
Editor(s): Yin,H.; Allinson,N.; Freeman,R.; Keane,J.; Hubbard,S.
Publisher: Springer-Verlag , Berlin,Germany
Publication Date: 2002 **Country of Publication:** Germany xv+597 pp.
ISBN: 3 540 44025 9   **Material Identity Number:** XX-2002-02174
Conference Title: Intelligent Data Engineering and Automated Learning-IDEAL 2002. Third International Conference
Conference Date: 12-14 Aug. 2002   **Conference Location:** Manchester, UK

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Practical (P); Theoretical (T)
Abstract: A probabilistic approach for focused crawling in hierarchically ordered information repositories is presented. The model is suitable for searching the World Wide Web and it is based on the fictitious play model from the theory of learning in games. The leading idea of the play is that players (software agents) are competing of the resources so that the search focuses on areas where relevant information can be found more likely. The model is basically a coordination model of the agent population but it is also possible to plug different features into the model, e.g. features for the user's relevance feedback or semantic links between documents. Additionally, the method is highly scalable and the efficient parallel implementation of the method is possible. (5 Refs)
Subfile: C
Descriptors: data mining; game theory; graph theory; **Internet**; multi-agent systems; **probability**; relevance feedback; **software agents**
Identifiers: focused crawling; fictitious play; probabilistic approach; hierarchically ordered information repositories; World Wide Web; learning; games; software agents; coordination model; agent population; relevance feedback; semantic links; parallel implementation
Class Codes: C7250R (Information retrieval techniques); C1140E (Game theory); C7210N (Information networks); C6170K (Knowledge engineering techniques); C1160 (Combinatorial mathematics)

15/5/3 (Item 3 from file: 2) **Links**

08535383   **INSPEC Abstract Number: C2003-03-7120-067**
Title: Probabilistic pricebots
Author Greenwald, A.R.; Kephart, J.O.
Author Affiliation: Dept. of Comput. Sci., Brown Univ., Providence, RI, USA
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents   p. 560-7
Editor(s): Muller, J.P.; Andre, E.; Sen, S,; Frasson, C.
Publisher: ACM , New York, NY, USA
Publication Date: 2001 **Country of Publication:** USA   xiii+666 pp.
ISBN: 1 58113 326 X   **Material Identity Number:** XX-2002-03003
U.S. Copyright Clearance Center Code: 1-58113-326-X/01/0005...$5.00
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents
Conference Sponsor: ACM
Conference Date: 28 May-1 June 2001   **Conference Location:** Montreal, Que., Canada

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Practical (P); Theoretical (T)

Abstract: Past research has been concerned with the potential of embedding deterministic pricing algorithms into pricebots: software agents used by on-line sellers to automatically price Internet goods. In this work, probabilistic pricing algorithms based on no-regret learning are explored, in both high-information and low-information settings. It is shown via simulations that the long-run empirical frequencies of prices in a market of no-regret pricebots can converge to equilibria arbitrarily close to an asymmetric Nash equilibrium; however, instantaneous price distributions need not converge. (14 Refs)
 Subfile: C
Descriptors: costing; electronic commerce; game theory; Internet; learning (artificial intelligence); probability; **software agents**
Identifiers: probabilistic pricebots; deterministic pricing algorithms; software agents; online sellers; Internet goods pricing; Shopbots; electronic commerce; game-theory; probabilistic pricing algorithms; no-regret learning; simulations; asymmetric Nash equilibrium
Class Codes: C7120 (Financial computing); C7210N (Information networks); C6150N (Distributed systems software); C7180 (Retailing and distribution computing); C1230L (Learning in AI); C1140E (Game theory)
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15/5/4 (Item 4 from file: 2) **Links**
08535382   **INSPEC Abstract Number: C2003-03-7120-066**
Title: An auction agent for bidding on combinations of items
Author Matsumoto, Y.; Fujita, S.
Author Affiliation: Computational Intelligence & Syst. Sci., Tokyo Inst. of Technol., Yokohama, Japan
Conference Title: Proceedings of the Fifth International Conference on Autonomous Agents   p. 552-9
Editor(s): Muller, J.P.; Andre, E.; Sen, S,; Frasson, C.
Publisher: ACM , New York, NY, USA
Publication Date: 2001 **Country of Publication:** USA   xiii+666 pp.
ISBN: 1 58113 326 X   **Material Identity Number:** XX-2002-03003

Language: English   Document Type: Conference Paper (PA)
Treatment: Theoretical (T); Experimental (X)

Abstract: This paper describes a way to obtain sub-optimal profits in bidding for combinations of goods that are on auction at different sites, and results for an autonomous agent that bids for goods according to the proposed strategy. The types of requirements for combinations are classified as complementary, substitutive and independent. For each type, this paper specifies the region in which bidding on goods will make a positive profit. A bidding strategy is then proposed for sequential auctions under the condition that the bids by the other participants in the auction can be represented by a probabilistic function. Two simulations were constructed to evaluate the proposed strategy. They indicated that the agent that applies the proposed strategy was superior to others that bid for combinations of goods according to simple and intuitive strategies. The simulations also indicated that the proposed strategy was the equilibrium strategy of those we tested, when two agents were simultaneously bidding for the same combination of goods. (9 Refs)
Subfile: C
Descriptors: electronic commerce; Internet; probability; software agents
Identifiers: auction agent; bidding; item combinations; sub-optimal profits; autonomous agent; sequential auctions; probabilistic function; simulations; equilibrium strategy; electronic commerce; Internet
Class Codes: C7120 (Financial computing); C7180 (Retailing and distribution computing) ; C6170 (Expert systems and other AI software and techniques); C7210N (Information networks); C6150N (Distributed systems software)

15/5/5 (Item 5 from file: 2) **Links**
   Fulltext available through: ACM - Association for Computing Machinery   custom link   USPTO Full Text Retrieval Options
INSPEC
07794034   INSPEC Abstract Number: C2001-02-7210N-015
Title: Learning probabilistic models of the Web
Author Hofmann, T.
Author Affiliation: Dept. of Comput. Sci., Brown Univ., Providence, RI, USA

Language: English   Document Type: Conference Paper (PA); Journal Paper (JP)
Treatment: Practical (P)

Abstract: In the World Wide Web, myriads of hyperlinks connect documents and pages to create an unprecedented, highly complex graph structure-the Web graph. This paper presents a novel approach to learning probabilistic models of the Web, which can be used to make reliable predictions about connectivity and the information content of Web documents. The proposed method is a probabilistic dimension reduction technique which recasts and unites latent semantic analysis with J. Kleinberg's (1998) hubs-and-authorities algorithm in a statistical setting. This is meant to be a first step towards the development of a statistical foundation for Web-related information technologies. Although this paper does not focus on a particular application, a variety of algorithms operating in the Web/Internet environment can take advantage of the presented techniques, including search engines, Web crawlers and information agent systems. (9 Refs)
 Subfile: C
Descriptors: hypermedia; information resources; **Internet**; learning (artificial intelligence); **probability**; search engines; **software agents**; statistics
Identifiers: probabilistic model learning; World Wide Web; hyperlinks; Web graph structure; reliable predictions; connectivity; Web document information content; probabilistic dimension reduction technique; latent semantic analysis; hubs-and-authorities algorithm; statistical setting; Web-related information technologies; Internet environment; search engines; Web crawlers; information agent systems
Class Codes: C7210N (Information networks); C6170K (Knowledge engineering techniques); C7250N (Search engines); C1140Z (Other topics in statistics); C6130M (Multimedia)
 Copyright 2000, IEE

 15/5/6 (Item 6 from file: 2) **Links**
INSPEC
07634905 **INSPEC Abstract Number: C2000-08-7250R-013**
Title: Collecting user access patterns for building user profiles and collaborative filtering
Author Wasfi, A.M.A.
Author Affiliation: Sch. of Comput. Sci., Univ. of Sci., Penang, Malaysia
Conference Title: IUI 99. 1999 International Conference on Intelligent User Interfaces   p. 57-64
Editor(s): Maybury, M.
Publisher: ACM , New York, NY, USA
Publication Date: 1999 **Country of Publication:** USA   x+205 pp.
ISBN: 1 58113 098 8   **Material Identity Number:** XX-1999-00101
U.S. Copyright Clearance Center Code: 1 58113 098 8/99/01...$5.00
Conference Title: Proceedings of IUI 99. Intelligent User Interfaces
Conference Sponsor: ACM
Conference Date: 5-8 Jan. 1999   **Conference Location:** Redondo Beach, LA, USA

Language: English   Document Type: Conference Paper (PA)
Treatment: Practical (P)
Abstract: The paper proposes a new learning mechanism to extract user preferences transparently for a World Wide Web recommender system. The general idea is that we use the entropy of the page being accessed to determine its interestingness based on its occurrence probability following a sequence of pages accessed by the user. The probability distribution of the pages is obtained by collecting the access patterns of users navigating on the Web. A finite context-model is used to represent the usage information. Based on our proposed model, we have developed

an autonomous agent, named ProfBuilder, that works as an online recommender system for a Web site. ProfBuilder uses the usage information as a base for content-based and collaborative filtering. (22 Refs)

Subfile: C

Descriptors: information needs; information resources; information retrieval; **Internet**; learning (artificial intelligence); **probability**; **software agents**

Identifiers: user access pattern collection; user profiles; collaborative filtering; learning; user preferences; World Wide Web; occurrence probability; Web pages; probability distribution; finite context-model; autonomous agent; ProfBuilder; Web site; content-based filtering; online recommender system

Class Codes: C7250R (Information retrieval techniques); C6170K (Knowledge engineering techniques); C7210N (Information networks); C7220 (Generation, dissemination, and use of information); C6170 (Expert systems and other AI software and techniques)

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Set      Items    Description
S1     2552903    S MULTITUD? OR MANY OR PLURAL OR PLURALITY OR MULTIPLE? OR SEVERAL OR
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S2     2554426    S AUCTION? ? OR MULTIAUCTION OR MULTI()AUCTION OR EXCHANGE OR INTERCHANGE
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S3    11005412    S PLAN? ? OR MODEL? ? OR STRATEG??? OR DESIGN? ? OR METHOD? ? OR
BLUEPRINT? ? OR LAYOUT? ? OR SYSTEM? ? OR SCHEME? ? OR PROCEDURE? ?
S4     1506164    S COMBINATION? ? OR COMBINATORIAL OR COMBINATIONAL OR COMBINATIVE OR
COMBINATORY OR CONJUGATIONAL?? OR CONJUGATIVE OR CONJUNCTIONAL?? OR CONNECTIONAL OR
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S5      447114    S OPTIMI?ATION OR COMBINED()VALUE OR (OPTIM??? OR OPTIMI?ATION OR
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OR FAVOURABLE OR HIGHEST OR POSITIVE)(3N)(RETURN? ? OR WORTH OR VALUE? ? OR GAIN? ? OR
EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR MARGIN? ?)
S6      925732    S COMMODIT??? OR ITEM? ? OR GOOD? ?
S7        1095    S S4()(RETURN? ? OR ROI OR WORTH OR VALUE? ? OR GAIN? ? OR EARNING? ? OR
PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR MARGIN? ?)
S8       16780    S (((PRESENT OR CURRENT OR EQUIVALENT OR PRESET OR PREDETERMINED OR
AUTOMATIC OR DESIGNATED OR SET)()(VALUE OR WORTH OR EQUIVALENT OR PRICE OR COST))(12N)
(INCREAS??? OR DECREAS??? OR GREAT??? OR LESSER OR MOST OR LEAST OR LESS))
S9       70372    S (E OR ELECTRONIC OR ONLINE OR ON()LINE OR INTERNET OR WEB)(2N)(COMMERCE
OR SHOP? OR RETAIL? OR SALES OR SELLING OR BUY??? OR PURCHAS??? OR ORDER? ? OR ORDERING)
OR ECOMMERCE
S10    1623398    S INTERNET OR INTRANET OR EXTRANET OR WIDE()AREA()NETWORK OR WAN OR
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LOCAL()AREA()NETWORK OR LAN OR NETWORK? ? OR CENTRAL()SERVER OR ONLINE OR ON()LINE OR
VIRTUAL OR HUB OR HUBS
S11    326917   S S1 AND S2
S12    217346   S S11 AND S3
S13     26648   S S12 AND S4
S14      1904   S S13 AND S5
S15       433   S S14 AND S10
S16       426   RD   (unique items)
S17       188   S S16 NOT PY>1999
S18        24   S S17 AND S6
S19     87856   S S2 (2W) S3
S20      2179   S S19 (S) S5
S21         4   S S20 (S) S8
S22         4   S S21 NOT S18
S23         2   S S4 AND S7 AND S8
S24     65509   S S4 AND S5
S25       105   S S24 AND S8
S26        64   S S25 NOT PY>1999
S27        62   RD   (unique items)
S28        10   S S27 AND S2
S29         8   S S28 NOT (S23 OR S22 OR S18)
S30   2932553   S AUTOMATIC???? OR SELECTIVELY OR DYNAMIC??? OR REAL()TIME OR REALTIME OR
ADAPTABL? OR ALTERABL? OR ALTERNAT? OR CHANGEABL? OR CONVERTIBL? OR ADJUSTABL? OR FLEXIB?
OR IMMEDIATE? OR INSTANT? OR INTERACTIV? OR ITERAT? OR MODIFIABL? OR ON(1W)FLY OR
SIMULTANEOUS? OR SYNCHRONOUS? OR UP(1W)DATE OR UP(2W)MINUTE OR UPDATE?
S31      4139   S (COMBINATION? ? OR COMBINATORIAL OR COMBINATIONAL) (3N) (RETURN? ? OR
WORTH OR VALUE? ? OR GAIN? ? OR EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR
PROCEEDS OR MARGIN? ? OR GOOD? ?)
S32     18344   S S30 (2W) S2
S33      3125   S S32 (3N) S3
S34         4   S S33 AND S31
S35         4   S S34 NOT (S29 OR S23 OR S22 OR S18)
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18/5/1 (Item 1 from file: 2) <u>Links</u>
INSPEC
08027912   INSPEC Abstract Number: C2001-10-1290D-045
Title: Taming the computational complexity of combinatorial auctions : optimal and approximate approaches

Author Fujishima, Y.; Leyton-Brown, K.; Shoham, Y.
Author Affiliation: Dept. of Comput. Sci., Stanford Univ., CA, USA
Conference Title: IJCAI-99. Proceedings of the Sixteenth International Joint Conference on Artificial Intelligence
Part vol.1   p. 548-53 vol.1
Editor(s): Dean, T.
Publisher: Morgan Kaufmann Publishers , San Francisco, CA, USA
Publication Date: 1999 **Country of Publication:** USA   2 vol. xxii+1452 pp.
ISBN: 1 55860 613 0   **Material Identity Number:** XX-1999-00967
Conference Title: Proceedings of Sixteenth International Joint Conference on Artificial Intelligence. IJCAI 99
Conference Sponsor: Int. Joint Conferences on Artificial Intelligence; Scandinavian AI Soc
Conference Date: 31 July-6 Aug. 1999   **Conference Location:** Stockholm, Sweden

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Theoretical (T)
Abstract: In **combinatorial auctions, multiple goods** are sold simultaneously and bidders may **bid** for arbitrary **combinations** of goods. Determining the outcome of such an **auction** is an **optimization** problem, that is, NP-complete in the general case. We propose two **methods** of overcoming this apparent intractability. The first **method**, which is guaranteed to be optimal, reduces running time by structuring the search space so that a modified depth-first search usually avoids even considering allocations that contain conflicting **bids**. Caching and pruning are also used to speed searching. Our second **method** is a heuristic, **market**-based approach. It sets up a **virtual multi**-round **auction** in which a **virtual** agent represents each original **bid** bundle and places **bids**, according to a fixed **strategy**, for each **good** in that bundle. We show through experiments on synthetic data that: 1) our first `method finds optimal allocations quickly and **offers good** any-time performance; and 2) in **many** cases our second **method**, despite lacking guarantees regarding optimality or running time, quickly reaches solutions that are nearly optimal. (12 Refs)
. **Subfile:** C
Descriptors: business data processing; computational complexity; operations research; **optimisation**; search problems
Identifiers: combinatorial auctions; computational complexity; **optimization**; NP-complete problem; search space; heuristics
Class Codes: C1290D (Systems theory applications in economics and business); C7100 (Business and administration); C1180 (Optimisation techniques); C4240C (Computational complexity); C1160 (Combinatorial mathematics)

18/5/2 (Item 2 from file: 2) <u>Links</u>
INSPEC
07289123   INSPEC Abstract Number: C1999-08-1290D-037

Title: Neural network applications of trading financial futures
Author Dahl, K.J.

Author Affiliation: Sch. of Math., Univ. of New South Wales, NSW, Australia
Conference Title: Proceedings of the Ninth Australian Conference on Neural Networks (ACNN'98)   p. 124-7
Editor(s): Downs,T.; Frean,M.; Gallagher,M.

Conference Title: Ninth Australian Conference on Neural Networks (ACNN'98)
Conference Date: 11-13 Feb. 1998   **Conference Location:** Brisbane, Qld., Australia

Language: English   **Document Type:** Conference Paper.(PA)
Treatment: Theoretical (T)

Abstract: The forecasting capabilities of feed-forward neural **networks** are applied to the LIFFE Bund futures financial time series of **trading** price. The aim of this study is to determine if **trading** off neural **network** predictions produces a significant profit. Firstly, this work differs from the **many** other applications in its use of intraday prices rather than the smaller end of day price set. We begin with prediction of local returns for both the raw and smoothed price series but deviate from the standard approach by the addition of an input variable that expresses the global nature of price in terms of price bounds on previous trades during that day. With an interest in entering a trade with a **favourable return** to risk ratio, we develop a variable that is the ratio of the maximum price over a set local horizon, to the next price below the minimum occupied before the maximum occurred. Next, with an objective function chosen to represent a cumulative **trading** profit, the neural **network** output is defined as the volume to be traded. Determination of **trading** volumes in **combination** with direction forecasts adds to the completeness of trade specification which is in significant contrast to the price forecasting literature. Learning to predict volume is found to be a difficult task and we observe poor solutions for particular intraday data sets. In summary we find that neural **networks** are powerful **methods** whose test results add weight to the Efficient **Market** Hypothesis, where we have found an unusably small **trading** profit greater than the value expected, which is zero for these contracts. (6 Refs)
 Subfile: C
Descriptors: commodity trading; economic cybernetics; feedforward neural nets; time series
Identifiers: financial futures; forecasting; feed-forward neural **networks**; LIFFE Bund futures; financial time series; **trading** price; neural **network** predictions; **trading** profit; neural **network** output
Class Codes: C1290D (Systems theory applications in economics and business); C1230D (Neural nets); C1140 (Probability and statistics)

18/5/3 (Item 3 from file: 2) **Links**
   Fulltext available through: John Wiley and Sons   USPTO Full Text Retrieval Options
INSPEC
07224123 **INSPEC Abstract Number:** C1999-05-1290D-084
Title: Dynamic multi-sector, multi-instrument financial networks with futures: modeling and computation
Author Nagurney, A.; Siokos, S.

Author Affiliation: Sch. of Manage., Massachusetts Univ., Amherst, MA, USA
Journal: Networks   vol.33, no.2   p. 93-108
Publisher: Wiley ,

Language: English   Document Type: Journal Paper (JP)
Treatment: Theoretical (T)

Abstract: In this paper, we develop a dynamic model of financial behavior in the case of multiple sectors and multiple instruments in the presence of financial futures, which demonstrates the evolution of the underlying networks through time. The dynamic model is formulated as a projected dynamical system whose set of stationary points coincides with the set of solutions to a variational inequality problem. We identify the network structure of the individual sectors' portfolio optimization problems out of equilibrium and then prove that the equilibrium solution can be reformulated as the solution to a network optimization problem, in which the network represents a merger of the individual networks . We subsequently provide a discrete time algorithm for the solution of the continuous time financial model, which exploits the network structure, and provide convergence results. The model and algorithm are then illustrated through numerical examples. (41 Refs)
 Subfile: C
Descriptors: commodity trading; continuous time systems; discrete time systems; optimisation
Identifiers: multi-instrument financial networks; modeling; dynamic model; financial behavior; multiple sectors; projected dynamical system; stationary points; variational inequality problem; network structure; portfolio optimization problems; network optimization problem; discrete time algorithm; continuous time financial model
Class Codes: C1290D (Systems theory applications in economics and business); C1180 (Optimisation techniques)
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   18/5/10 (Item 10 from file: 2) Links
INSPEC
05407524   INSPEC Abstract Number: C9306-7120-006
Title: An intelligent forecasting system of stock price using neural networks
Author Baba, N.; Kozaki, M.
 Author Affiliation: Osaka Educ. Univ., Ikeda City, Japan
Conference Title: IJCNN International Joint Conference on Neural Networks (Cat. No.92CH3114-6)   p. 371-7 vol.1
Publisher: IEEE , New York, NY, USA
Publication Date: 1992 Country of Publication: USA   4 vol. (xii+962+xiii+1023+xii+1006+xi+868) pp.
ISBN: 0 7803 0559 0
U.S. Copyright Clearance Center Code: 0 7803 0559 0/92/$3.00
Conference Sponsor: IEEE; Int. Neural Network Soc
Conference Date: 7-11 June 1992   Conference Location: Baltimore, MD, USA

Language: English   Document Type: Conference Paper (PA)
Treatment: Practical (P)

Abstract: A neural network system developed for forecasting stock prices in the Japanese market is presented. The hybrid algorithm, which combines the modified BP (backpropagation) method with the random optimization method, has been used for training the parameters in the neural network. It has been shown by several simulation

results that this neural **network system** is quite helpful for making a **good** forecast of stock prices. (14 Refs)
 Subfile: C
Descriptors: backpropagation; financial data processing; neural nets; stock markets
Identifiers: intelligent forecasting **system**; stock price; neural **networks**; Japanese **market**; **hybrid** algorithm; backpropagation; random **optimization**
Class Codes: C7120 (Finance); C1230D (Neural nets); C5290 (Neural computing techniques)

35/5/1 (Item 1 from file: 2) <u>Links</u>
INSPEC

08313259 **INSPEC Abstract Number:** C2002-08-1290D-029
Title: An iterative generalized Vickrey auction: strategy -proofness without complete revelation
Author Parkes, D.C.
Author Affiliation: Dept. of Comput. & Inf. Sci., Pennsylvania Univ., Philadelphia, PA, USA
Conference Title: Game Theoretic and Decision Theoretic Agents. Papers from the 2001 AAAI Symposium.
Technical Report SS-01-03   p. 78-87
Publisher: AAAI Press , Menlo Park, CA, USA
Publication Date: 2001 **Country of Publication:** USA   vii+168 pp.
ISBN: 1 57735 131 2   **Material Identity Number:** XX-2001-00503
Conference Title: Proceedings of 2001 Spring Symposium Series. Game Theoretic and Decision Theoretic Agents
Conference Date: 26-28 March 2001   **Conference Location:** Stanford, CA, USA

Language: English   **Document Type:** Conference Paper (PA)
Treatment: Theoretical (T)

Abstract: The generalized Vickrey auction (GVA) is a strategy-proof combinatorial auction, in which truthful bidding is the optimal strategy for an agent. In this paper, we address a fundamental problem with the GVA, which is that it requires agents to compute and reveal their **values** for all **combinations** of items. This can be very difficult for bounded-rational agents with limited or costly computation. We propose an experimental **design** for an **iterative** combinatorial **auction**. We have a theoretical proof that the the auction implements the outcome of the Vickrey auction in special cases, and initial experimental results support our conjecture that the auction implements the outcome of the Vickrey auction in all cases. The auction has better information properties than the sealed-bid GVA: in each round, agents must only bid for the set of bundles that maximize their utility, given current ask prices, which does not require agents to compute their exact values for every bundle. (28 Refs)
 Subfile: C
Descriptors: combinatorial mathematics; competitive algorithms; economic cybernetics; game theory; iterative methods; multi-agent systems
Identifiers: iterative generalized Vickrey auction; strategy-proof combinatorial auction ; incomplete revelation; truthful bidding; optimal agent strategy; agent values; item combinations; bounded-rational agents; limited computation; costly computation; iterative combinatorial auction; information properties ; sealed-bid auction; bundles; utility maximization; ask prices
Class Codes: C1290D (Systems theory applications in economics and business); C1160 (Combinatorial mathematics); C1140E (Game theory); C1230 (Artificial intelligence)

35/5/3 (Item 3 from file: 2) <u>Links</u>
   Fulltext available through: <u>USPTO Full Text Retrieval Options</u>
INSPEC

07834836   INSPEC Abstract Number: C2001-03-1290D-089
Title: Asset allocation and derivatives
Author Haugh, M.B.; Lo, A.W.
Author Affiliation: Sloan Sch. of Manage., MIT, Cambridge, MA, USA
Journal: Quantitative Finance   vol.1, no.1   p. 45-72
Publisher: IOP ,
Publication Date: Jan. 2001 **Country of Publication:** UK
CODEN: QFUIAV ISSN: 1469-7688
SICI: 1469-7688(200101)1:1L.45:AAD;1-7
   Material Identity Number: G416-2001-001

Language: English   **Document Type:** Journal Paper (JP)
Treatment: Bibliography (B); Theoretical (T)

Abstract: The fact that derivative securities are equivalent to specific **dynamic trading strategies** in complete markets suggests the possibility of constructing buy-and-hold portfolios of options that mimic certain dynamic investment policies, e.g. asset-allocation rules. We explore this possibility by solving the following problem: given an optimal dynamic investment policy, find a set of options at the start of the investment horizon which will come closest to the optimal dynamic investment policy. We solve this problem for several **combinations** of preferences, **return** dynamics and optimality criteria, and show that under certain conditions, a portfolio consisting of just a few options is an excellent substitute for considerably more complex dynamic investment policies. (77 Refs)
 Subfile: C
Descriptors: differential equations; investment; minimisation; securities trading
Identifiers: asset allocation; derivative securities; **dynamic trading strategies**; complete markets; buy-and-hold portfolios; dynamic investment policies; investment horizon; return dynamics; optimality criteria; portfolio
Class Codes: C1290D (Systems theory applications in economics and business); C1120 (Mathematical analysis); C1180 (Optimisation techniques)

 35/5/4 (Item 1 from file: 35) <u>Links</u>
Dissertation Abs Online
01873721   ORDER NO: AADAA-I0803584
Essays in financial engineering

Author: Haugh, Martin B.
Degree: Ph.D.
Year: 2001
Corporate Source/Institution: Massachusetts Institute of Technology (0753)
Supervisor: Andrew W. Lo
Source: Volume 6302B of Dissertations Abstracts International.
PAGE 1005 .

Descriptors: OPERATIONS RESEARCH ; ECONOMICS, FINANCE
Descriptor Codes: 0796; 0508

This thesis consists of three essays that apply techniques of operations research to problems in financial engineering. In particular, we study problems in portfolio optimization and options pricing.

The first essay is motivated by the fact that derivative securities are equivalent to specific **dynamic trading strategies** in complete markets. This suggests the possibility of constructing buy-and-hold portfolios of options that mimic certain dynamic investment policies, e.g., asset-allocation rules. We explore this possibility by solving the following problem: given an optimal dynamic investment policy, find a set of options at the start of the investment horizon which will come closest to the optimal dynamic investment policy. We solve this problem for several **combinations** of preferences, **return** dynamics, and optimality criteria, and show that under certain conditions, a portfolio consisting of just a few European options is an excellent substitute for considerably more complex dynamic investment policies.

In the second essay, we develop a method for pricing and exercising high-dimensional American options. The approach is based on approximate dynamic programming using nonlinear regression to approximate the value function. Using the approximate dynamic programming solutions, we construct upper and lower bounds on the option prices. These bounds can be evaluated by Monte Carlo simulation, and they are general enough to be used in conjunction with other approximate methods for pricing American options. We characterize the theoretical worst-case performance of the pricing bounds and examine how they may be used for hedging and exercising the option. We also discuss the implications for the design of the approximate pricing algorithm and illustrate its performance on a set of sample problems where we price call options on the maximum and the geometric mean of a collection of stocks.

The third essay explores the possibility of solving high-dimensional portfolio optimization problems using approximate dynamic programming. In particular, we employ approximate value iteration where the portfolio strategy at each time period is obtained using quadratic approximations to the approximate value function. We then compare the resulting solution to the best heuristic strategies available. Though the approximate dynamic programming solutions are often competitive, they are sometimes dominated by the best heuristic strategy. On such occasions we conclude that inaccuracies in the quadratic approximations are responsible for the poor performance. Finally, we compare our results to other recent work in this area and suggest possible methods for improving these algorithms. (Copies available exclusively from MIT Libraries, Rm. 14-0551, Cambridge, MA 02139-4307. Ph. 617-253-5668; Fax 617-253-1690.)

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Set     Items     Description
S1    10950624     S MULTITUD? OR MANY OR PLURAL OR PLURALITY OR MULTIPLE? OR SEVERAL OR
MULTI OR MYRIAD OR PROFUSION OR NUMEROUS OR DIFFERENT (LARGE OR UNUSUAL)()(NUMBER OR
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S2    19153769     S AUCTION? ? OR MULTIAUCTION OR MULTI()AUCTION OR EXCHANGE OR INTERCHANGE
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S5     1065906     S OPTIMI?ATION OR COMBINED()VALUE OR (OPTIM??? OR OPTIMI?ATION OR
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PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR MARGIN? ?)
S7       88831     S (((PRESENT OR CURRENT OR EQUIVALENT OR PRESET OR PREDETERMINED OR
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(INCREAS??? OR DECREAS??? OR GREAT??? OR LESSER OR MOST OR LEAST OR LESS))
S8     1529487     S (E OR ELECTRONIC OR ONLINE OR ON()LINE OR INTERNET OR WEB)(2N)(COMMERCE
OR SHOP? OR RETAIL? OR SALES OR SELLING OR BUY??? OR PURCHAS??? OR ORDER? ? OR ORDERING)
OR ECOMMERCE
S9      607884     S S1 (3N) S2
S10      20589     S S9 (2W) S3
S11       1115     S S10 (S) S4
S12         17     S S11 (S) S5
S13         10     RD  (unique items)
S14      83424     S (AUTOMATIC???? OR SELECTIVELY OR DYNAMIC??? OR REAL()TIME OR REALTIME OR
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OR INSTANT? OR INTERACTIV? OR ITERAT? OR MODIFIABL? OR ON(1W)FLY OR SIMULTANEOUS? OR
SYNCHRONOUS? OR UP(1W)DATE OR UP(2W)MINUTE OR UPDATE?) (W) S2
S15       8470     S S14 (3N) S3
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S16       46702    S S4 (3N) (COMMODIT??? OR ITEM? ? OR GOOD? ?)
S17       55935    S S16 OR S6
S18          12    S S17 (2S) S15
S19           8    RD   (unique items)
S20           8    S S19 NOT S13
S21         102    S S15 (S) S5
S22           7    S S21 (S) (INTERNET OR INTRANET OR EXTRANET OR WIDE()AREA()NETWORK OR WAN
OR LOCAL()AREA()NETWORK OR LAN OR NETWORK? ? OR CENTRAL()SERVER OR ONLINE OR ON()LINE OR
VIRTUAL OR HUB OR HUBS)
S23           6    RD   (unique items)
S24           6    S S23 NOT (S13 OR S20)
S25         466    S (COMBINATION? ? OR COMBINATORIAL OR COMBINATIONAL OR COMBINATIVE OR
COMBINATORY OR CONJUGATIONAL?? OR CONJUGATIVE OR CONJUNCTIONAL??)()(RETURN? ? OR WORTH OR
VALUE? ? OR GAIN? ? OR EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR
MARGIN? ? OR MATH OR MATHEMATIC? ? OR PROBABILITY)
S26          22    S S25 (S) (AUCTION? ? OR MULTIAUCTION OR MULTI()AUCTION OR TRADING OR BID
OR BIDS OR BIDDING)
S27          14    RD   (unique items)
S28          14    S S27 NOT (S13 OR S20 OR S24)
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13/5,K/1 (Item 1 from file: 15) <u>Links</u>
Fulltext available through: <u>USPTO Full Text Retrieval Options</u>   <u>ProQuest</u>

03148335   1161791311
          USE FORMAT 7 OR 9 FOR FULL TEXT
The Transition to Electronic Communications Networks in the Secondary Treasury Market

Mizrach, Bruce; Neely, Christopher J

Abstract:

This article reviews the history of the recent shift to electronic trading
in equity, foreign exchange, and fixed-income markets. The authors analyze
a new data set: the eSpeed electronic Treasury network. They contrast the
market microstructure of the eSpeed trading platform with the traditional
voice-assisted networks that report through GovPX. The electronic market
(eSpeed) has greater volume, smaller spreads, and a lower estimated trade
impact than the voice market (GovPX). (PUBLICATION ABSTRACT)

Descriptors: Electronic trading systems; Communications networks; Equity; Foreign exchange; Fixed incomes;
Regression analysis; Studies
Classification Codes: 3400 (CN=Investment analysis & personal finance); 5240 (CN=Software & systems); 9130
(CN=Experimental/Theoretical)
Print Media ID: 23954
Text:

...and BrokerTec

Cantor was not alone in seeing the potential of an electronic IDB bond-
trading system. In 1999, **several** other Wall Street
firms, including Morgan Stanley Dean Witter & Co. and Goldman Sachs
Inc., founded BrokerTec Global LLC. ICAP is the product of a **merger**
between Garban PLC and Intercapital PLC in September 1999; originally
called Garban-Intercapital, the name was changed to ICAP in July 2001. ICAP
is currently the world's **largest** IDB with **revenues** of L794
million, and operating profits of L122.7 million. The company trades

publicly on...

13/5,K/2 (Item 1 from file: 16) **Links**
Gale Group PROMT(R)
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10295699   **Supplier Number: 98366597 (USE FORMAT 7 FOR FULLTEXT)**

CombineNet Founder and Chief Technology Officer Receives Prestigious Awards for Scientific Achievement.
PR Newswire , p PHW00305032003
March 5 , 2003
Language: English   **Record Type:** Fulltext
Document Type: Newswire ; Trade
Word Count: 673
Publisher Name: PR Newswire Association, Inc.
Industry Names: BUS (Business, General); BUSN (Any type of business)

...He has published more than 130 technical papers on electronic commerce,
game theory, artificial intelligence, **multi-** agent **systems,**
auctions, automated negotiation and contracting, coalition
formation, bounded rationality, machine learning, constraint satisfaction,
and **combinatorial optimization.**
       In addition to these honors, Dr. Sandholm has received several
prestigious academic awards including the...

13/5,K/4 (Item 1 from file: 148) **Links**
Gale Group Trade & Industry DB
(c)2007 The Gale Group. All rights reserved.
0018462274   **Supplier Number: 134044089 (USE FORMAT 7 OR 9 FOR FULL TEXT)**
Products & services.(2005 guide to computerized trading)(Directory)

Futures (Cedar Falls, Iowa) , 34 , 8 , 44(33)
June 15 , 2005
Document Type: Directory
ISSN: 0746-2468
Language: English
Record Type: Fulltext
Word Count: 22270   **Line Count:** 02150
Company Names: Microsoft Corp.--Forecasts and trends; Microsoft Corp.--Management; Interactive Brokers
L.L.C.--Forecasts and trends; Interactive Brokers L.L.C.--Management; Tick Data Inc.--Forecasts and trends; Tick
Data Inc.-- Management; Track Data Corp.--Forecasts and trends; Track Data Corp.-- Management
Industry Codes/Names: BUSN Business; BUS Business, general
Descriptors: United States. Commodity Futures Trading Commission--Management; Computer software
industry--Forecasts and trends; Securities industry--Forecasts and trends; Commodity futures
Geographic Codes: 1USA United States

```
...SYST, TAC, MM)
      PortfolioStream 6
      Pentium II, 128 MB RAM
      This new portfolio testing and optimization platform for
TradeStation can test large baskets of stocks, futures or indexes across
several trading system input combinations in an automated
environment. Includes money management strategies.
      (PORT, TAC, SYST, MM)
      3D SmartView
      Pentium...
```

20/5,K/1 (Item 1 from file: 15) **Links**
   Fulltext available through: USPTO Full Text Retrieval Options
ABI/Inform(R)

02774310   676726021
                USE FORMAT 7 OR 9 FOR FULL TEXT

Performance Evaluation of Hedge Funds: A Literature Review of Theoretical and Empirical Issues and Contributions

Abstract:

Today, the hedge fund industry has become one of the fastest growing
sectors in finance. But, despite the popularity of such tools of
investment, there are very few studies in the hedge fund area. The few
studies done analyze hedge fund performance, compare it to different market
indices and benchmarks and study biases of hedge fund data. Recent papers
present new performance analysis methods, and test for a possible
persistence in performance. In this paper, we try to review the principal
results of this literature, concentrating on the main issues in hedge fund
performance evaluation, and on the most recent theoretical developments.

Our purpose is to give an appraisal of the main theoretical and empirical
results in this domain. The paper also examines recent models on the
performance of hedge managers and on the persistence of such performance.
(PUBLICATION ABSTRACT)

Descriptors: Hedge funds; Growth industries; Performance evaluation; Mathematical models
Classification Codes: 9130 (CN=Experimental/Theoretical); 3400 (CN=Investment analysis & personal finance)
Print Media ID: 52141
Text:

...linked to traditional asset classes (U.S. equity, and high-yield). The
remaining three are **dynamic trading strategies,**
non-linear functions of the traditional asset classes returns. Even worse,
hedge funds often follow...

...As a consequence, Fung and Hsieh suggest adding regressors to proxy the
returns of these **dynamic trading strategies.** In
particular, they use a non-parametric form of regression to find the
corresponding **dynamic trading strategy** to replicate
hedge fund returns. They observe that a twelve-factor model - nine asset
classes...

...different hedge fund strategies. Although, in practice, these hedge
funds can follow a variety of **dynamic trading
strategies,** the authors find that adding a few simple option
writing/buy ing strategies to the...

...bond index and JP Morgan Emerging Market Bond Index) and finally a
commodity factor (GSCI **Commodity** Index). Beyond the
combination of these existing models, the author argues that the
originality of his model is to...

24/3,K/6 (Item 3 from file: 16) **Links**
Gale Group PROMT(R)
03679713   **Supplier Number: 45201803 (USE FORMAT 7 FOR FULLTEXT)**

Japanese risk management product in works
Pensions & Investments , p 35
Dec 12 , 1994
Language: English   **Record Type:** Fulltext
Document Type: Magazine/Journal ; Trade
Word Count: 159

...chairman and chief executive officer of BARRA, the analytical software
developer and consultant.
        QUICK's **on-line** Japanese market data platform will
distribute the risk management system. The Japanese equity model developed
by QUICK and BARRA to control risk will be a low-priced, **on-
line** service for institutional money managers. The **system**
will combine **real-time market** data with practical
tools such as risk analysis, **optimization** and screening functions.
        QUICK, based in Tokyo, supplies data to clients in 20 countries.
        BARRA...

28/3,K/2 (Item 2 from file: 15) <u>Links</u>
ABI/Inform(R)
02087385   63089211
Multilateral, multi-term trades possible through Net exchange

Anonymous
Wall Street & Technology v18n11 pp: 38-40
Nov 2000
ISSN: 1060-989X Journal Code: WSC
Word Count: 896
Text:

...outcome of other trades," says Charles Polk, principal of Net Exchange,
"then the investor has **combinatorial values** to which a
trading system should cater. Most systems other than Bond Connect do
not address the opportunity costs...

...the multiple legs of their portfolio transactions simultaneously, Polk
adds, they would be willing to **bid** more and ask less for each
because they would no longer have to hedge their...

...pending uncertainty over subsequent trades. In effect, the combinatorial
system increases liquidity by decreasing the **trading** risk associated
with partial execution, while facilitating multilateral exchanges.
"Portfolio managers have analytics that allow...

28/3,K/3 (Item 3 from file: 15) <u>Links</u>
ABI/Inform(R)
01913765   05-64757
Out of sample, out of touch

Lasky, Paul H
Futures-Cedar Falls v28n1 pp: 58-60

Jan 1999
ISSN: 0746-2468 **Journal Code:** CMM
Word Count: 2149

Abstract:

The most important problem facing systems traders is assuring their
trading systems will generate profits in real time. Any system can
be optimized to perform well...

...parameters, such as the length of a moving average, can be tweaked
continuously until one **combination returns** substantial
profits in hypothetical **trading**. Repeated Measures Analysis
compares the equity curve of a system using optimal parameter values with
...

Text:

...parameters, such as the length of a moving average, can be tweaked
continuously until one **combination returns** substantial
profits in hypothetical **trading**. The real-time performance of most
such systems, though, usually is poor. But "usually" doesn...

28/3,K/4 (Item 4 from file: 15) **Links**
ABI/Inform(R)

00152775   81-22652
Trainers to Turnstiles: Cubic Corp. Boasts a Wide and Profitable Product Mix

Gordon, Mitchell
Barron's v61n38 pp: 48-49
Sep 21, 1981
ISSN: 0005-6073 **Journal Code:** BAR

Abstract:

...devices. The 3 lines share a computer-based technology. The mix has
proved a winning **combination. Profits** have risen threefold
in the past 5 years. This year should mark the 6th successive...

...producer of fare collection systems, it will be up against French and
Japanese competitors when **bidding** for the Hong Kong subway system.
Capital expenditures will likely rise to about $5 million...

28/3,K/5 (Item 1 from file: 16) **Links**
Gale Group PROMT(R)

13271094   **Supplier Number: 147654980 (USE FORMAT 7 FOR FULLTEXT)**

FactSet Mergerstat Release: Global M&A Wrap Up for the First Half of 2006.
Business Wire , p NA
June 30 , 2006
Language: English   **Record Type:** Fulltext
Document Type: Newswire ; Trade
Word Count: 1117

```
...from US$191 million for the same period last year.
       The top announced deal (or bid) in Europe this year has been
Gaz de France's agreement to merge its operations with SUEZ SA in a
combination valued at EUR37.9 billion (US$46 billion). EON
AG's bid to acquire the Spanish utility company Empresa Nacional de
Electricidad SA (Endesa) for EUR29.1...

...4 billion) claims the second spot, followed by Mittal Steel Co NV's
hostile takeover bid for Arcelor SA for EUR25.6 billion (US$32.9
billion), Merck KGaA's offer...
```

28/3,K/6 (Item 2 from file: 16) **Links**
Gale Group PROMT(R)
08096499   **Supplier Number: 66933730 (USE FORMAT 7 FOR FULLTEXT)**

Multilateral, Multi-Item Trades Possible Though Net Exchange.(Company Operations)
Wall Street & Technology , v 18 , n 11 , p 38
Nov , 2000
Language: English   **Record Type:** Fulltext
Document Type: Magazine/Journal ; Trade
Word Count: 977

```
...outcome of other trades," says Charles Polk, principal of Net Exchange,
"then the investor has combinatorial values to which a
trading system should cater. Most systems other than Bond Connect do
not address the opportunity costs...

...the multiple legs of their portfolio transactions simultaneously, Polk
adds, they would be willing to bid more and ask less for each
because they would no longer have to hedge their...

...pending uncertainty over subsequent trades. In effect, the combinatorial
system increases liquidity by decreasing the trading risk associated
with partial execution, while facilitating multilateral exchanges.
```

"Portfolio managers have analytics that allow...

28/3,K/7 (Item 3 from file: 16) **Links**
Gale Group PROMT(R)
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06955113   **Supplier Number: 58722762 (USE FORMAT 7 FOR FULLTEXT)**

Omega Research and OnlineTrading.com Agree to $300 Million Merger To Create World's First Institutional Level Trading Platform For the Active Online Trader.
PR Newswire , p 5844
Jan 20 , 2000
Language: English   **Record Type:** Fulltext
Document Type: Newswire ; Trade
Word Count: 1727

...traders, today announced a definitive agreement to merge the two
companies in an all-stock **combination valued** at approximately
$300 million. The combination will create the world's first institutional
level **trading** platform for the active trader.
        The strategic combination of these companies will create a seamlessly
. . .

28/3,K/8 (Item 1 from file: 148) **Links**
Gale Group Trade & Industry DB
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0019916076   **Supplier Number: 74577687 (USE FORMAT 7 OR 9 FOR FULL TEXT)**
DaimlerChrysler initiates largest online bidding process.

M2 Presswire , NA
May 16 , 2001
Language: English
Record Type: Fulltext
Word Count: 520   **Line Count:** 00047

...proved to be very competitive. Over four days, 1,200 parts were traded
in 80 **combinations worth** up to EUR 2 billion a piece. The
total volume of orders that will be...

...on the order of EUR 3.5 billion. Covisint provided the Internet
application for the **bidding** and successfully managed the event
without any technical problems.
        It again became evident that, even...

28/3,K/9 (Item 2 from file: 148) <u>Links</u>
Gale Group Trade & Industry DB
0018848610   Supplier Number: 137752006 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Silent auctions in the field and in the laboratory.

Isaac, R. Mark; Schnier, Kurt
Economic Inquiry , 43 , 4 , 715(19)
Oct , 2005
ISSN: 0095-2583
Language: English
Record Type: Fulltext; Abstract
Word Count: 11092   **Line Count:** 00992

...interesting possibilities. As in any multiple-good auction, there is the
possibility that bidders have **combinatorial values** over the
items. Yet the silent **auction** does not allow for combinatorial
bidding. An argument can be made that it does allow bidders a chance
to "adjust their portfolio" in real time to address **combinatorial
values**. Altough **combinatorial values** are intriguing,
they will not be a focus of this article. On the other hand, we will
consider at length the feature of a typical silent **auction** that the
goods are geographically dispersed. It takes time to move from one
bidding station to another.
          Endogenous Ascending Ticks (Possibility of Jump Bidding)
          The possibility of jump bidding...

28/3,K/10 (Item 3 from file: 148) <u>Links</u>
Gale Group Trade & Industry DB
16725697   Supplier Number: 113234461 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Cascade of Wash. Buying Issaquah.(Cascade Financial Corp, Issaquah Bancshares Inc)(Brief Article)

Kuehner-Hebert, Katie
American Banker , 169 , 30 , 4
Feb 13 , 2004
Document Type: Brief Article
ISSN: 0002-7561
Language: English
Record Type: Fulltext
Word Count: 160   **Line Count:** 00016

...a share. The price would depend on Cascade's average closing price in
the 20-**trading**-day period that ends three days before the deal

closes.
         Issaquah Bank would operate as...

28/3,K/11 (Item 4 from file: 148) <u>Links</u>
Gale Group Trade & Industry DB
(c)2007 The Gale Group. All rights reserved.
16721132   **Supplier Number: 113343287 (USE FORMAT 7 OR 9 FOR FULL TEXT)**
Shippers get strategic in comparing performance.(Evaluating Service vs. Cost)

Hannon, David
Purchasing , 133 , 2 , 40(3)
Feb 5 , 2004
ISSN: 0033-4448
Language: English
Record Type: Fulltext
Word Count: 1982   **Line Count:** 00161

...information after each phase of award. At first glance, the ease of use
and the **combinatorial mathematics** and optimization capability
from CombineNet were very intriguing. We used it first on a $20... '

...spend. We got our feet wet there and got excited about putting our
truckload transportation **bid** out on this tool."
         Weller says individual business units want savings from the carrier
selection...

28/3,K/12 (Item 5 from file: 148) <u>Links</u>
Gale Group Trade & Industry DB
(c)2007 The Gale Group. All rights reserved.
16186612   **Supplier Number: 107202915 (USE FORMAT 7 OR 9 FOR FULL TEXT)**
Market design and human trading behavior in electricity markets.

Olson, Mark; Rassenti, Stephen; Rigdon, Mary; Smith, Vernon
IIE Transactions , 35 , 9 , 833(17)
Sept , 2003
ISSN: 0740-817X
Language: English
Record Type: Fulltext; Abstract
Word Count: 9653   **Line Count:** 00987

...flower auctions. His current work is focused on complex markets where
networking, fixed costs, and **combinatorial values** are
present. He is currently studying market ...the transmission of electric
power and ambient pollution permits. The studies include deregulation,

demand side **bidding** and market power in electric power markets where
network, reactive power, and transmission constraints are...

28/3,K/13 (Item 6 from file: 148) <u>Links</u>
Gale Group Trade & Industry DB
(c)2007 The Gale Group. All rights reserved.
12048816   Supplier Number: 61650827 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Funco juggles suitors EB and Babbage's.(Brief Article)

Rivero, Enrique
Video Business , 20 , 15 , 4
April 10 , 2000
Document Type: Brief Article
ISSN: 0279-571X
Language: English
Record Type: Fulltext
Word Count: 312   **Line Count:** 00028

...a unit of Barnes & Noble, to buy Funco in a cash or cash-and-stock
combination worth $135 million.
        Funco is an attractive target for acquisition because of the niche it
has...

28/3,K/14 (Item 7 from file: 148) <u>Links</u>
Gale Group Trade & Industry DB
(c)2007 The Gale Group. All rights reserved.
10861428   Supplier Number: 54036004 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Out of sample, out of touch.(alternative to out-of-sample testing for validating optimal trading approaches)

Lasky, Paul H.
Futures (Cedar Falls, Iowa) , 28 , 1 , 58(3)
Jan , 1999
ISSN: 0746-2468
Language: English
Record Type: Fulltext; Abstract
Word Count: 2448   **Line Count:** 00209

...parameters, such as the length of a moving average, can be tweaked
continuously until one **combination returns** substantial
profits in hypothetical **trading**. The real-time performance of most
such systems, though, usually is poor. But "usually" doesn...

[File 9] **Business & Industry(R)** Jul/1994-2007/May 10

[File 20] **Dialog Global Reporter** 1997-2007/May 11

[File 476] **Financial Times Fulltext** 1982-2007/May 11

[File 610] **Business Wire** 1999-2007/May 11
File 610: File 610 now contains data from 3/99 forward. Archive data (1986-2/99) is available in File 810.

[File 613] **PR Newswire** 1999-2007/May 11
File 613: File 613 now contains data from 5/99 forward. Archive data (1987-4/99) is available in File 813.

[File 624] **McGraw-Hill Publications** 1985-2007/May 11
File 624: Homeland Security & Defense and 9 Platt energy journals added Please see HELP NEWS624 for more

[File 636] **Gale Group Newsletter DB(TM)** 1987-2007/May 10

[File 634] **San Jose Mercury** Jun 1985-2007/May 09

[File 810] **Business Wire** 1986-1999/Feb 28

[File 813] **PR Newswire** 1987-1999/Apr 30

```
; d s
Set     Items   Description
S1       385    S (COMBINATION? ? OR COMBINATORIAL OR COMBINATIONAL OR COMBINATIVE OR
COMBINATORY OR CONJUGATIONAL?? OR CONJUGATIVE OR CONJUNCTIONAL??) () (RETURN? ? OR WORTH OR
VALUE? ? OR GAIN? ? OR EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR
MARGIN? ? OR MATH OR MATHEMATIC? ? OR PROBABILITY)
S2     5869585  S AUCTION? ? OR MULTIAUCTION OR MULTI()AUCTION OR TRADING OR BID OR BIDS
OR BIDDING
S3      116145  S S2 (3N) (AUTOMATIC???? OR SELECTIVELY OR DYNAMIC??? OR REAL()TIME OR
REALTIME OR ADAPTABL? OR ALTERABL? OR ALTERNAT? OR CHANGEABL? OR CONVERTIBL? OR ADJUSTABL?
OR FLEXIB? OR INSTANT? OR INTERACTIV? OR ITERAT? OR MODIFIABL? OR ON(1W)FLY OR
SIMULTANEOUS? OR SYNCHRONOUS? OR UP(1W)DATE OR UP(2W)MINUTE OR UPDATE?)
S4    16881963  S MULTITUD? OR MANY OR PLURAL OR PLURALITY OR MULTIPLE? OR SEVERAL OR
MULTI OR MYRIAD OR PROFUSION OR NUMEROUS OR DIFFERENT (LARGE OR UNUSUAL) () (NUMBER OR
QUANTIT??? OR VOLUME OR AMOUNT? ? OR MAGNITUDE)
S5    27050469  S PLAN? ? OR MODEL? ? OR STRATEG??? OR DESIGN? ? OR METHOD? ? OR
BLUEPRINT? ? OR LAYOUT? ? OR SYSTEM? ? OR SCHEME? ? OR PROCEDURE?
```

```
S6    1210555   S OPTIMI?ATION OR COMBINED()VALUE OR (OPTIM??? OR OPTIMI?ATION OR
SUB()OBTIM BEST OR GREATEST OR BIGGEST OR MOST OR LARGEST OR MAXIM??? OR TOP OR FAVORABLE
OR FAVOURABLE OR HIGHEST OR POSITIVE)(3N)(RETURN? ? OR WORTH OR VALUE? ? OR GAIN? ? OR
EARNING? ? OR PROFIT? ? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR MARGIN? ?)
S7      60608   S (S1 OR S4)()(COMMODIT??? OR ITEM? ? OR GOOD? ?)
S8        358   S S1()(RETURN? ? OR WORTH OR VALUE? ? OR GAIN? ? OR EARNING? ? OR PROFIT?
? OR REVENUE? ? OR INCOME? ? OR PROCEEDS OR MARGIN? ?)
S9     102293   S (((PRESENT OR CURRENT OR EQUIVALENT OR PRESET OR PREDETERMINED OR
AUTOMATIC OR DESIGNATED OR SET)()(VALUE OR WORTH OR EQUIVALENT OR PRICE OR COST)) (12N)
(INCREAS??? OR DECREAS??? OR GREAT??? OR LESSER OR MOST OR LEAST OR LESS))
S10  11298122   S INTERNET OR INTRANET OR EXTRANET OR WIDE()AREA()NETWORK OR WAN OR
LOCAL()AREA()NETWORK OR LAN OR NETWORK? ? OR CENTRAL()SERVER OR ONLINE OR ON()LINE OR
VIRTUAL OR HUB OR HUBS
S11   1832560   S (E OR ELECTRONIC OR ONLINE OR ON()LINE OR INTERNET OR WEB)(2N)(COMMERCE
OR SHOP? OR RETAIL? OR SALES OR SELLING OR BUY??? OR PURCHAS??? OR ORDER? ? OR ORDERING)
OR ECOMMERCE
S12         38   S S1 (S) S2
S13         30   RD  (unique items)
S14          3   S S13 NOT PY>1999
S15       8099   S S3 (3N) S5
S16        127   S S15 (S) S6
S17         16   S S16 NOT PY>1999
S18      74875   S S4 (3N) S2
S19        951   S S18 (S) S6
S20         53   S S19 (S) S11
S21         39   RD  (unique items)
S22          2   S S21 NOT PY>1999
S23         13   S S1 (S) S6
S24          6   S S23 NOT PY>1999
S25    1483050   S COMBINATION? ? OR COMBINATORIAL OR COMBINATIONAL OR COMBINATIVE OR
COMBINATORY OR CONJUGATIONAL?? OR CONJUGATIVE OR CONJUNCTIONAL??
S26      25120   S S25 (S) S6
S27         92   S S7 (2S) S26
S28          1   S S27 NOT PY>1999
S29       4187   S S9 (S) S2
S30        373   S S29 (S) S6
S31         17   S S30 NOT PY>1999
S32         17   RD  (unique items)
S33        116   S S25 (S) S3 (S) S6
S34        107   RD  (unique items)
S35          8   S S34 NOT PY>1999
```

17/3,K/1 (Item 1 from file: 9) <u>Links</u>
Business & Industry(R)
00544744 Supplier Number: 23020245 **(USE FORMAT 7 OR 9 FOR FULLTEXT)**
The FCC Will Sell No Spectrum Before Its Time
(The FCC moves cautiously on PCS spectrum auction; narrowband spectrum to be auctioned first, broadband unlikely before fall of 1994)

America's Network , p 22+
April 15, 1994
Document Type: Journal **ISSN:** 1075-5292 (United States)
Language: English **Record Type:** Fulltext
Word Count: 761 **(USE FORMAT 7 OR 9 FOR FULLTEXT)**

TEXT:

The FCC chose simultaneous multiple round auctioning as its preferred
method for the **most** highly-**valued** 2GHz broadband spectrum.
Under this **method**, participants will **bid**
simultaneously for numerous licenses, examine results at the end of
each round, and decide whether to...

17/3,K/8 (Item 1 from file: 624) <u>Links</u>
McGraw-Hill Publications

01012840
 RELIANT ISSUES REPORT DISPUTING ISO CLAIM THAT RMR CONTRACT LED
    TO SUMMER SPIKES
Power Markets Week, Vol. 25, No. 17, Pg 9
April 26, 1999
JOURNAL CODE: PMW
SECTION HEADING: CALIFORNIA   ISSN: 1078-9820
WORD COUNT: 409

TEXT:

... the California markets,'' the company said. The ISO report concludes
that RMR operators modified their **bidding** strategies to
maximize real-time revenues over the summer,
leading to price spikes in the PX hour-ahead and day-ahead...

24/3,K/2 (Item 1 from file: 636) <u>Links</u>

01561756   Supplier Number: 42302152 (USE FORMAT 7 FOR FULLTEXT)

ALLOCATION SYSTEM CAN INCREASE PROFITS
Mortgage-Backed Securities Letter , v 6 , n 33 , p N/A
August 19 , 1991
Language: English   **Record Type:** Fulltext
Document Type: Newsletter ; Trade
Word Count: 453
(USE FORMAT 7 FOR FULLTEXT)
Text:

...of mortgage securities. In tests, the Allocator Expert System (ALEXSYS)
has been able to achieve "**maximum** potential **profit**" and has
been able pool the mortgages in as little as one minute. Developers of the
system, which uses a combination of a rule-based expert system and
combinatorial mathematics, sighted one test in which ALEXSYS
made 85% more profits than allocators who normally pool...

32/3,K/15 (Item 2 from file: 636) **Links**
02860062   Supplier Number: 45801157 (USE FORMAT 7 FOR FULLTEXT)

House GOP Has Its Say, Changes Energy Status Quo
Energy Daily , v 23 , n 179 , p N/A
Sept 20 , 1995
Language: English   **Record Type:** Fulltext
Document Type: Newsletter ; Trade
Word Count: 746

...The purchaser must be financially qualified and have experience in the
power business; the winning **bid** must be the one offering the
highest total **value** to the federal government; the purchaser
must pay at **least** the net **present value** of the
outstanding debt attributable to the facilities being bought; and the
purchaser must agree...

35/3,K/2 (Item 1 from file: 636) **Links**
03018549   Supplier Number: 46160501 (USE FORMAT 7 FOR FULLTEXT)

FHA to Auction CRA Mortgages
Regulatory Compliance Watch , v 6 , n 7 , p N/A
Feb 19 , 1996
Language: English **Record Type:** Fulltext
Document Type: Newsletter ; Trade
Word Count: 392

...is no limitation on the number of blocks in a bid. This gives bidders
maximum **flexibility** in structuring pool **bids**, while enabling
smaller market players to participate. FHA will select those
combinations which provide the **highest returns** to the
taxpayers.
    FHA is encouraging investors to develop ongoing businesses around the
purchase of...

 35/3,K/3 (Item 2 from file: 636) <u>Links</u>
Gale Group Newsletter DB(TM)
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02314836   **Supplier Number: 44499899 (USE FORMAT 7 FOR FULLTEXT)**

Untitled Article
Communications Daily , v 14 , n 45 , p N/A
March 8 , 1994
Language: English **Record Type:** Fulltext
Document Type: Newsletter ; Trade
Word Count: 230
(USE FORMAT 7 FOR FULLTEXT)
Text:

NTIA told FCC in ex parte submission that Commission ought to select so
-called Electronic **Iterative Combinatorial Auction**
(EICA) when it sets competitive bidding procedures at agenda meeting today
(Tues.) because test at...

...and efficient way to assign PCS licenses." EICA method would let
companies select bids on **combinations** of PCS licenses and let them
revise bids in response to others' bids. Bidders would...

...when an IECA was conducted... meaning that all licenses were won by the
subject that **valued** them the **most**." NTIA told FCC: "We
believe that there will be increasing returns to scale in acquiring...

 35/3,K/4 (Item 3 from file: 636) <u>Links</u>

02224014   Supplier Number: 44232638 (USE FORMAT 7 FOR FULLTEXT)

FCC URGED TO CONDUCT SPECTRUM AUCTIONS BY COMPUTER
Communications Daily , v 13 , n 219 , p N/A
Nov 15 , 1993
Language: English   **Record Type:** Fulltext
Document Type: Newsletter ; Trade
Word Count: 728

On more general issues, NTIA said that FCC should give bidders more
flexibility during **auction**, saying that proposal
"artificially limits the permissible **combinations**" on which parties
could bid. NTIA said that under FCC plan, bidders could buy only...

...of limited groupings available, licenses "are likely to be awarded to
parties that do not **value** them the **highest**, which is
inefficient."
     Under NTIA's proposal, bidders would submit simultaneous electronic
bids on any...